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Kelly et al.

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(54) **NETWORKED GAMING SYSTEM COMMUNICATION PROTOCOLS AND METHODS**

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(73) Assignee: **Bally Gaming, Inc.**, Las Vegas, NV (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1274 days.

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(22) Filed: **Nov. 12, 2008**

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Related U.S. Application Data

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(51) **Int. Cl.**
G06F 17/00 (2006.01)
G07F 17/32 (2006.01)

(52) **U.S. Cl.**
CPC ***G07F 17/3267*** (2013.01)

(58) **Field of Classification Search**
USPC 463/16, 17, 42
See application file for complete search history.

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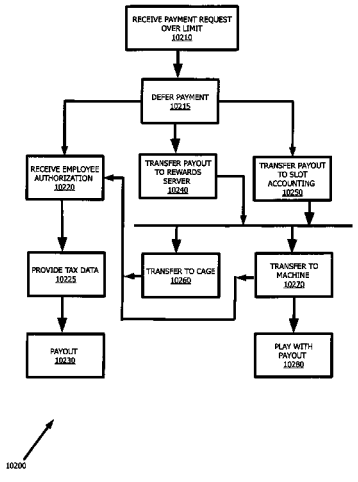
(57) **ABSTRACT**

A system, method and apparatus for a gaming system is provided. The gaming system includes a rewards server and a separate gaming or slot accounting server. The system may further include a separate player tracking server. The system further includes one or more game machines. The game machines may include a base game, rewards tracking module, and a game management module. Further details will be apparent from the description, drawings and claims.

11 Claims, 169 Drawing Sheets



Related U.S. Application Data

11/470,606, filed on Sep. 6, 2006, and a continuation-in-part of application No. 10/943,771, filed on Sep. 16, 2004.

(60) Provisional application No. 60/865,649, filed on Nov. 14, 2006, provisional application No. 60/987,234, filed on Nov. 12, 2007, provisional application No. 60/987,274, filed on Nov. 12, 2007, provisional application No. 60/987,259, filed on Nov. 12, 2007, provisional application No. 60/987,266, filed on Nov. 12, 2007, provisional application No. 60/987,402, filed on Nov. 12, 2007.

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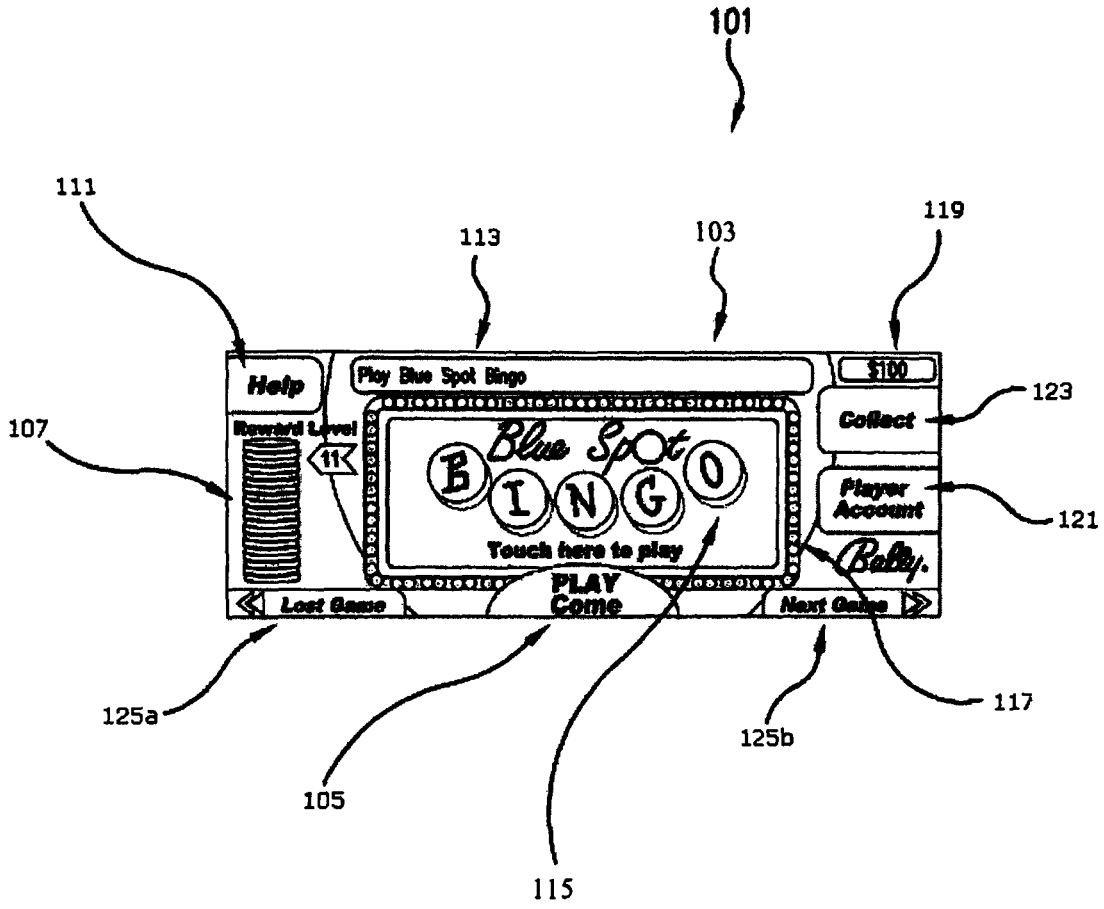
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113
103
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Help
Play Blue Spot Bingo
$100
Reward Level
11
Blue Spot
BINGO
Touch here to play
Collect
123
Player Account
121
Bally.
PLAY
Come
Last Game
Next Game
107
125a
105
115
125b
117

FIG. 1

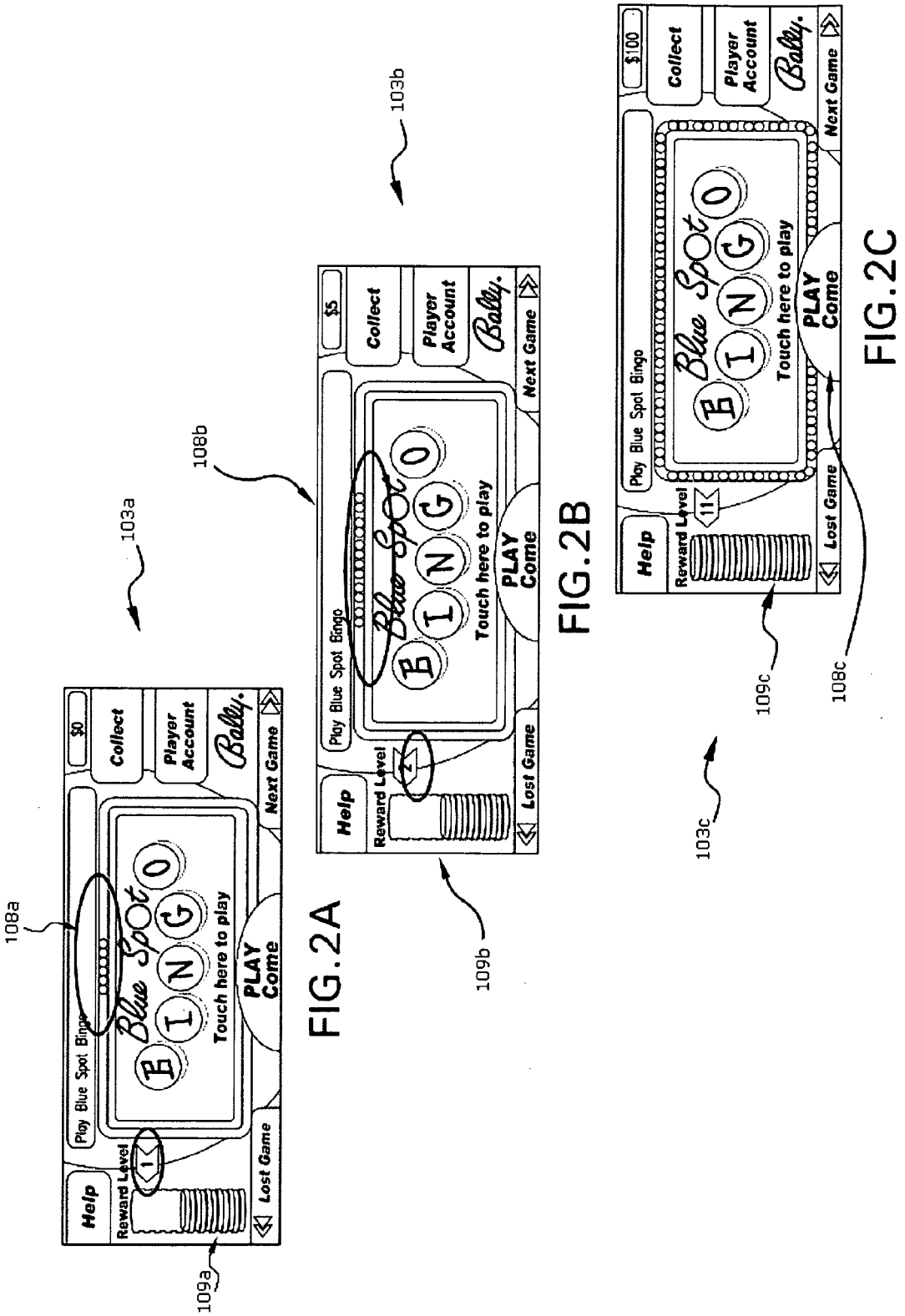


FIG.2A

FIG.2B

FIG.2C

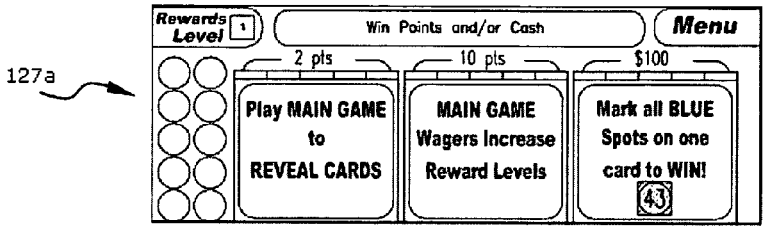


FIG.3A

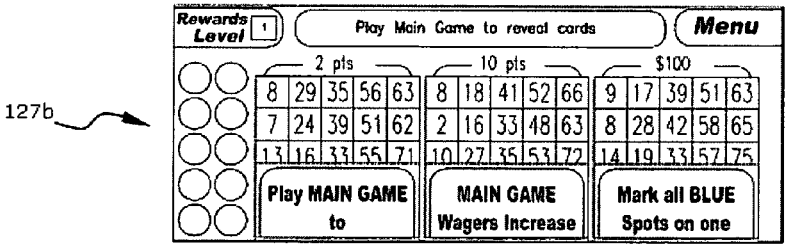


FIG.3B

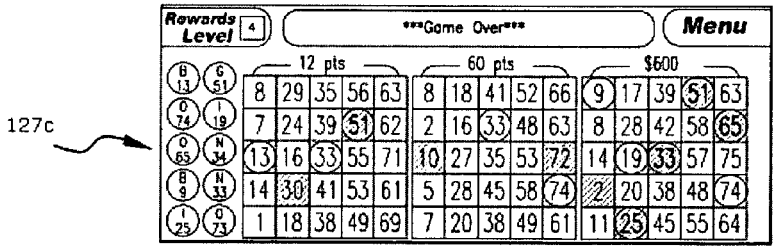
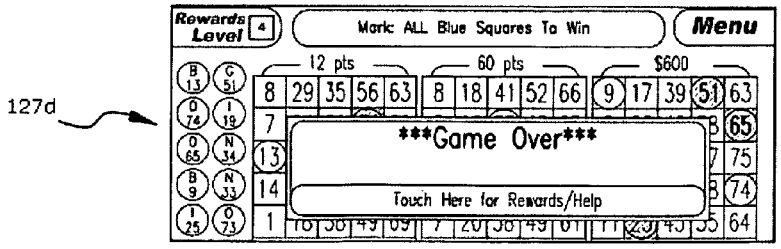


FIG.3C



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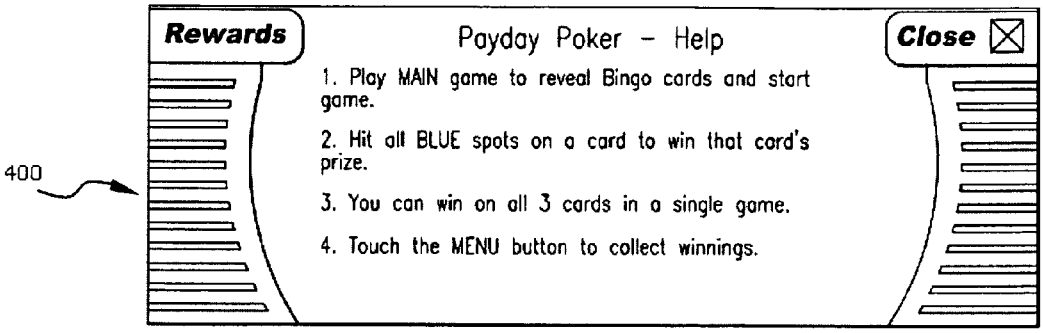
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Payday Poker - Help
Close
1. Play MAIN game to reveal Bingo cards and start game.
2. Hit all BLUE spots on a card to win that card's prize.
3. You can win on all 3 cards in a single game.
4. Touch the MENU button to collect winnings.
400

FIG.4A

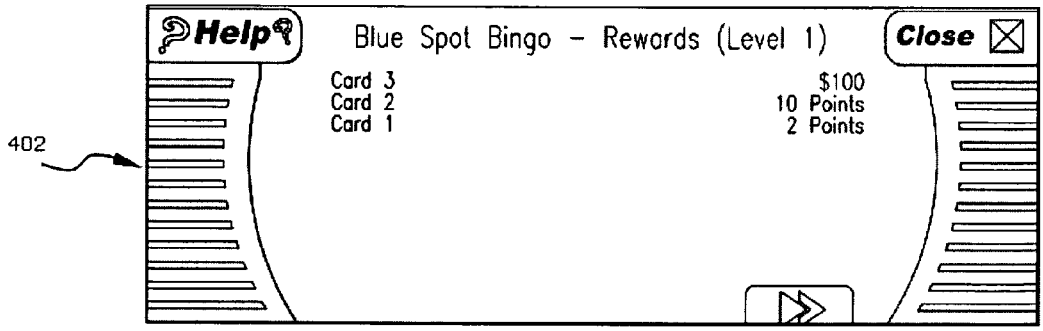
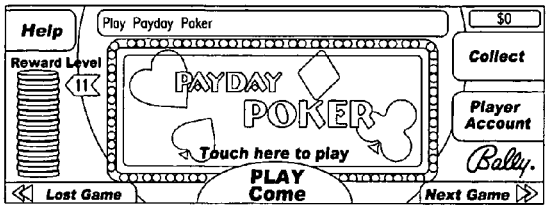
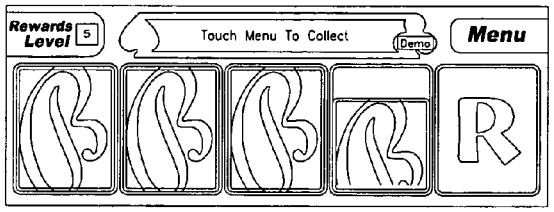

Help
Blue Spot Bingo - Rewards (Level 1)
Close
Card 3 $100
Card 2 10 Points
Card 1 2 Points
402

FIG.4B



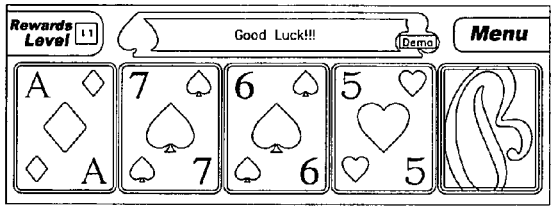
500

FIG.5A



502

FIG.5B



504

FIG.5C

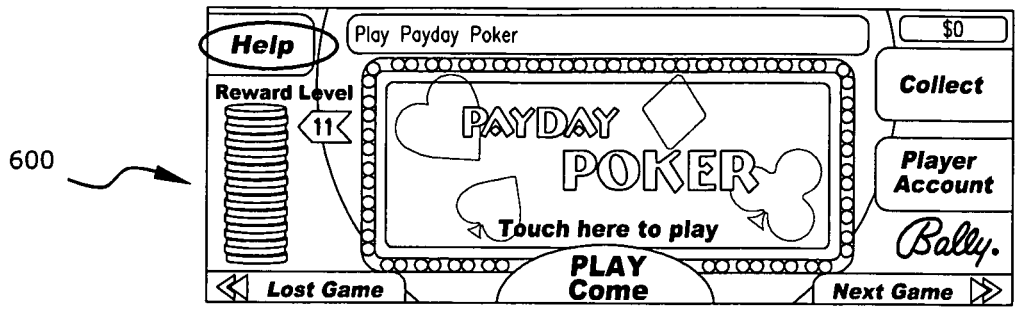


FIG.6A

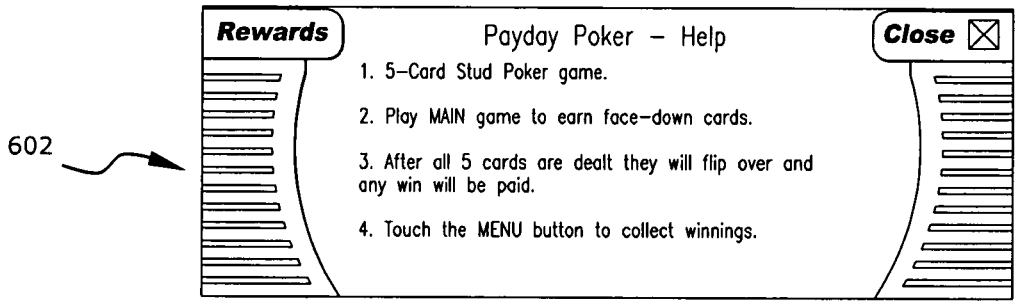


FIG.6B

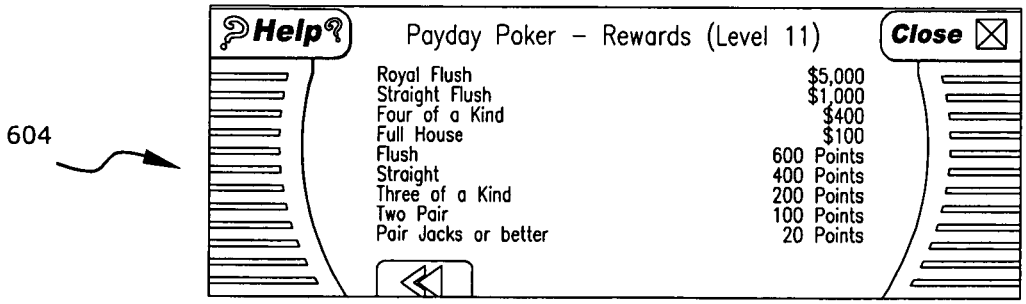


FIG.6C

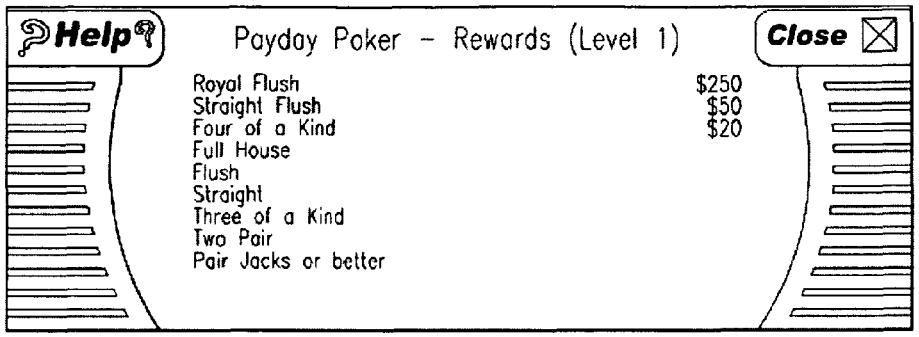


FIG. 7A

Better Pay Tables
for increased EGM wagering

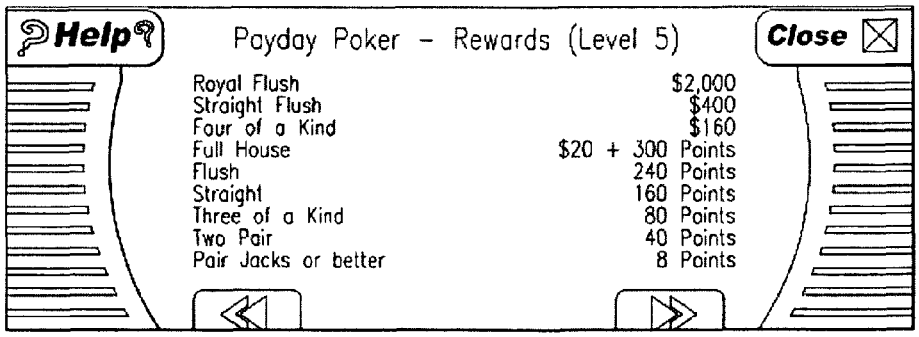


FIG. 7B

FIG.8A

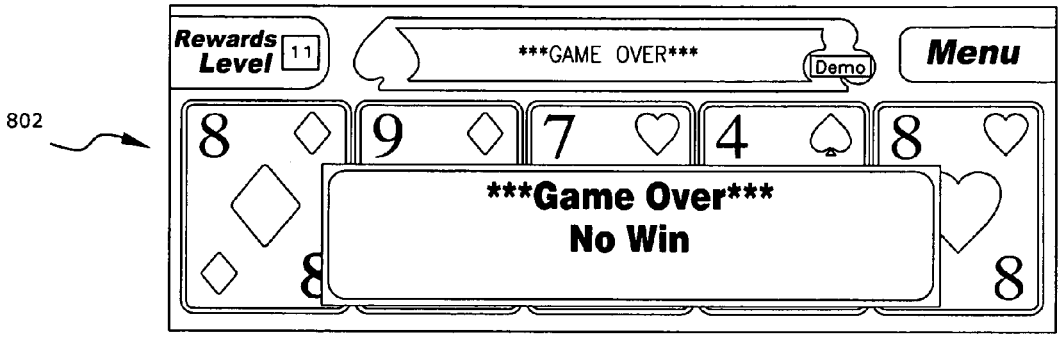


FIG.8B

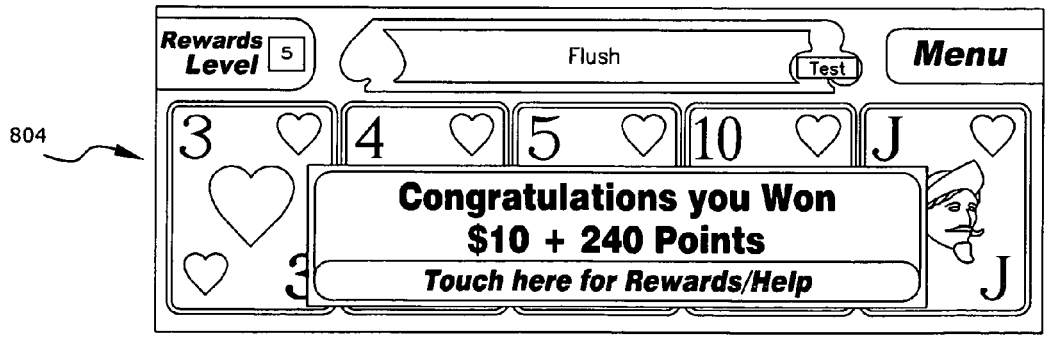


FIG.8C

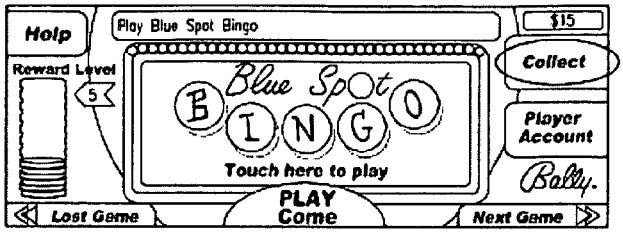


FIG.9A-1

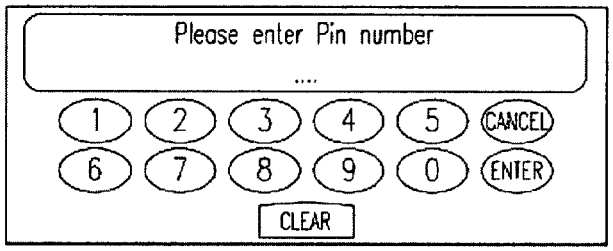


FIG.9A-2

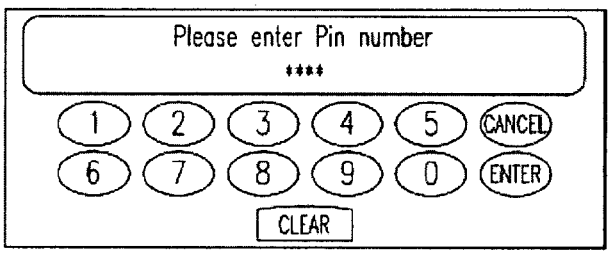


FIG.9A-3

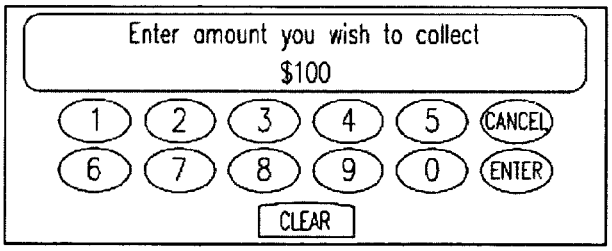


FIG.9A-4

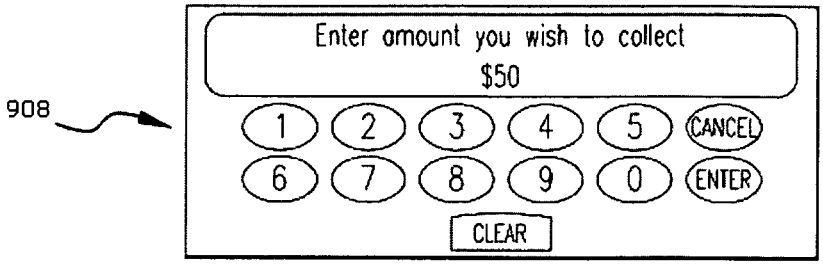


FIG.9B-1

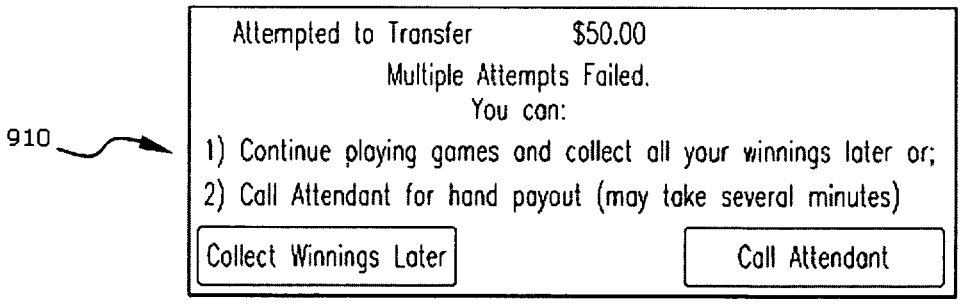
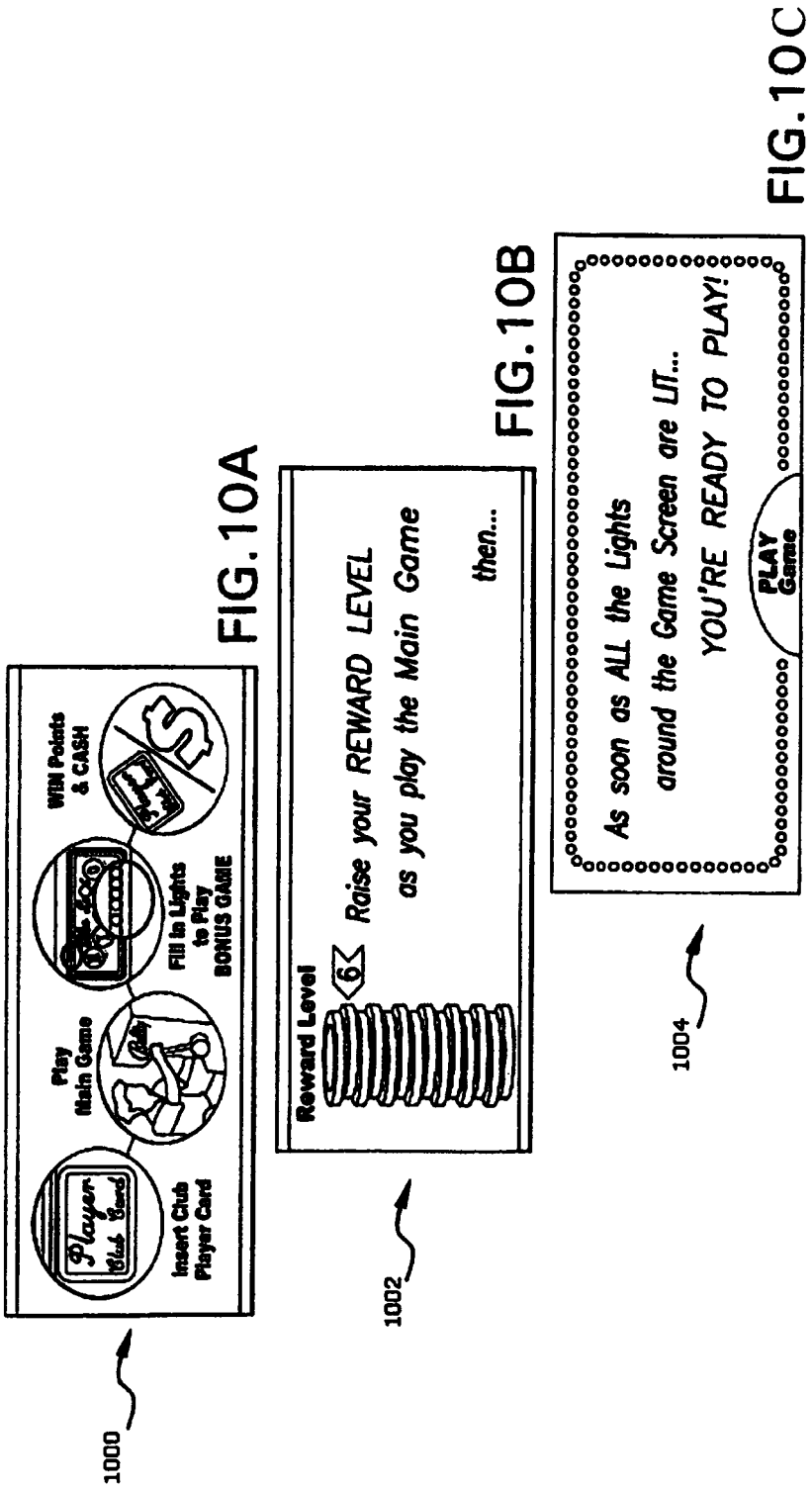


FIG.9B-2


1000
Insert Club Player Card
Play Main Game
Fill In Lights to Play BONUS GAME
WIN Points & CASH
FIG.10A
1002
Reward Level
6
Raise your REWARD LEVEL as you play the Main Game then...
FIG.10B
1004
As soon as ALL the Lights around the Game Screen are LIT... YOU'RE READY TO PLAY!
PLAY Game
FIG.10C

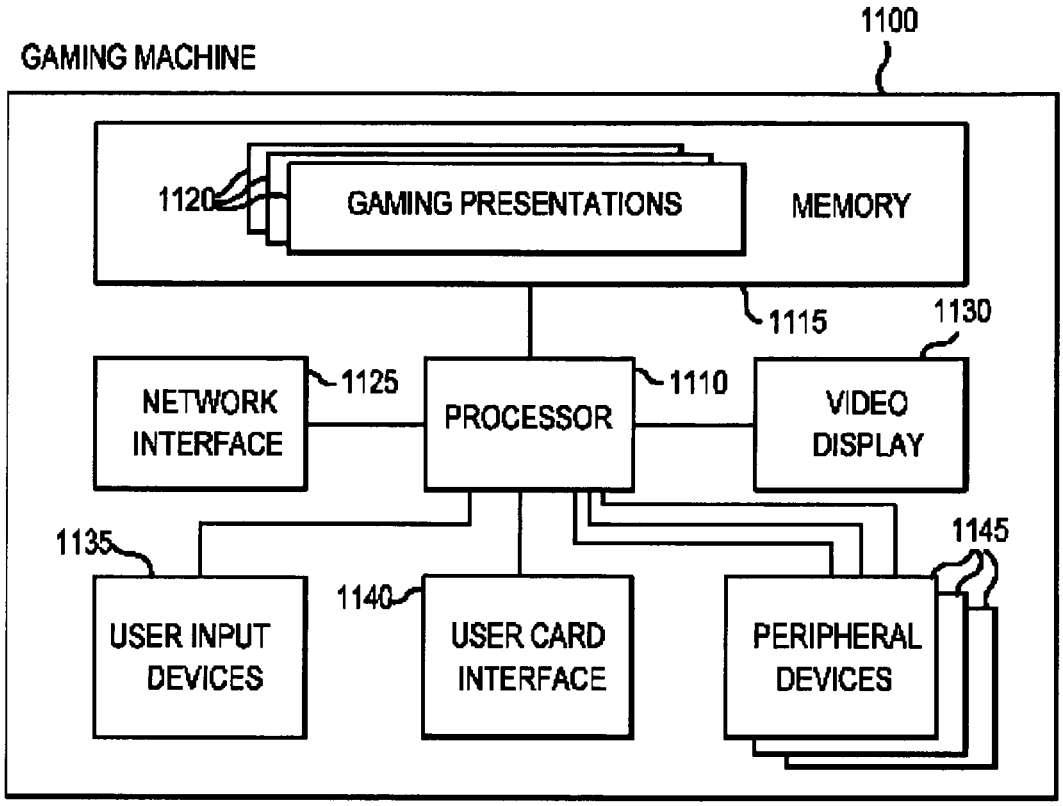

GAMING MACHINE
1100
1120
GAMING PRESENTATIONS
MEMORY
1115
1130
NETWORK INTERFACE
1125
PROCESSOR
1110
VIDEO DISPLAY
1135
1140
1145
USER INPUT DEVICES
USER CARD INTERFACE
PERIPHERAL DEVICES

FIG. 11A

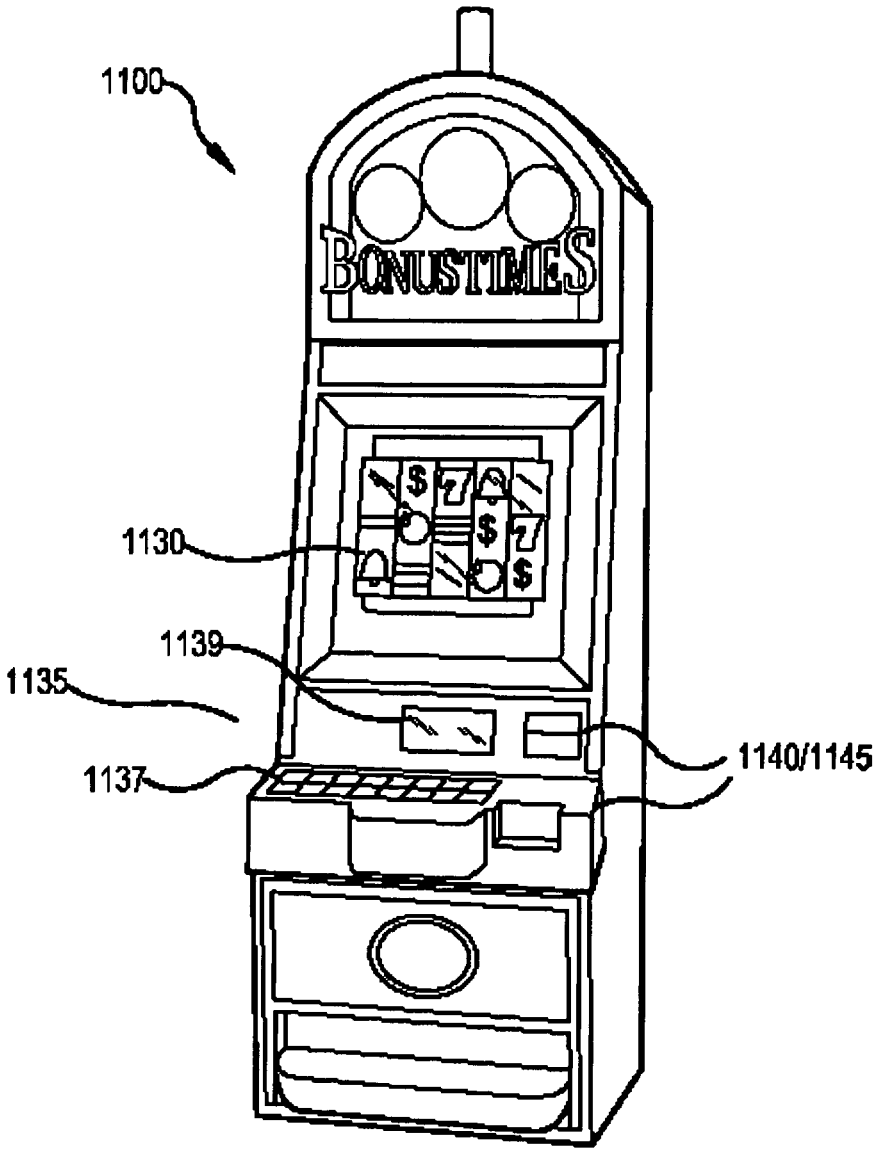


FIG. 11B

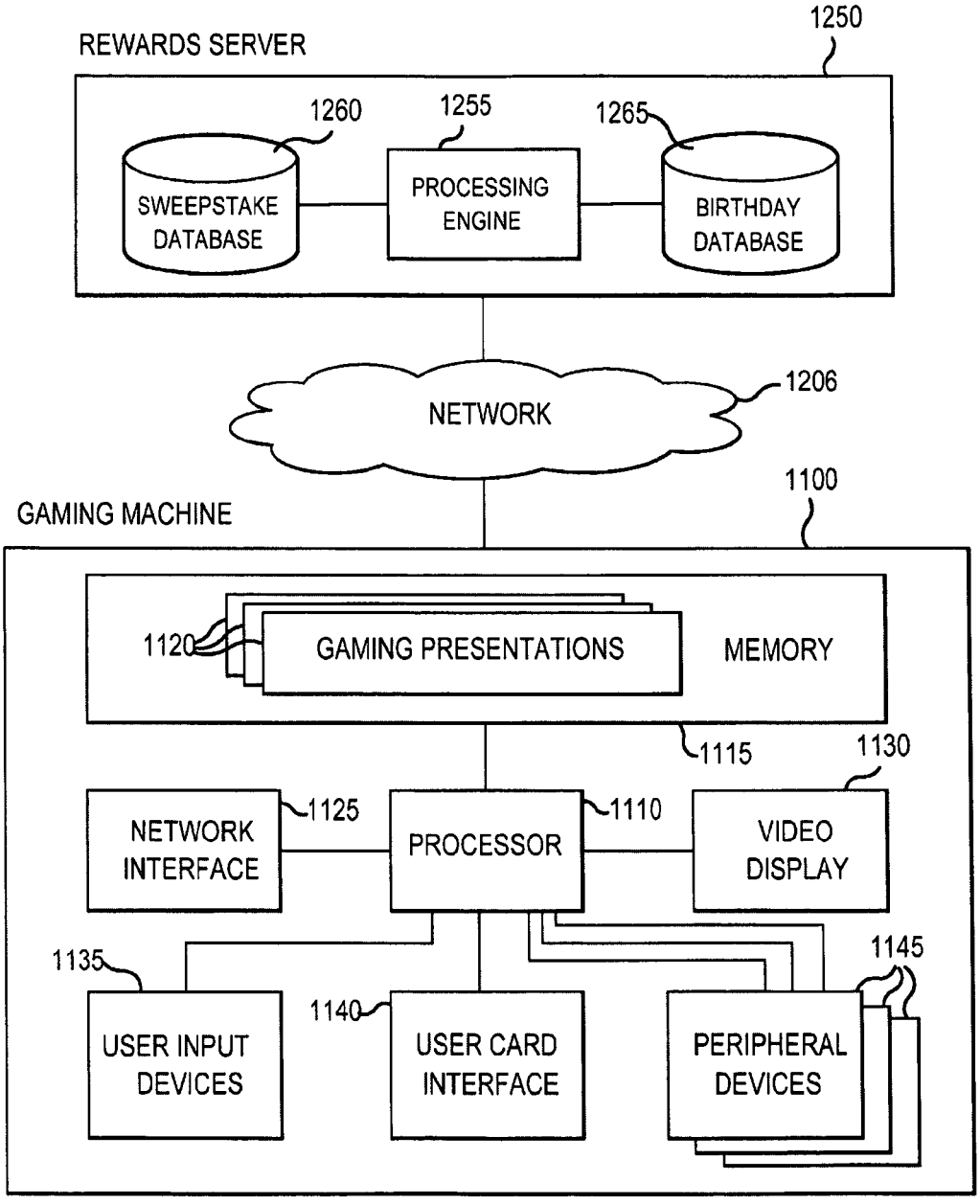

REWARDS SERVER
1250
1260
1255
1265
SWEEPSTAKE DATABASE
PROCESSING ENGINE
BIRTHDAY DATABASE
NETWORK
1206
GAMING MACHINE
1100
1120
GAMING PRESENTATIONS
MEMORY
1115
1130
NETWORK INTERFACE
1125
PROCESSOR
1110
VIDEO DISPLAY
1135
1145
1140
USER INPUT DEVICES
USER CARD INTERFACE
PERIPHERAL DEVICES

FIG. 12A

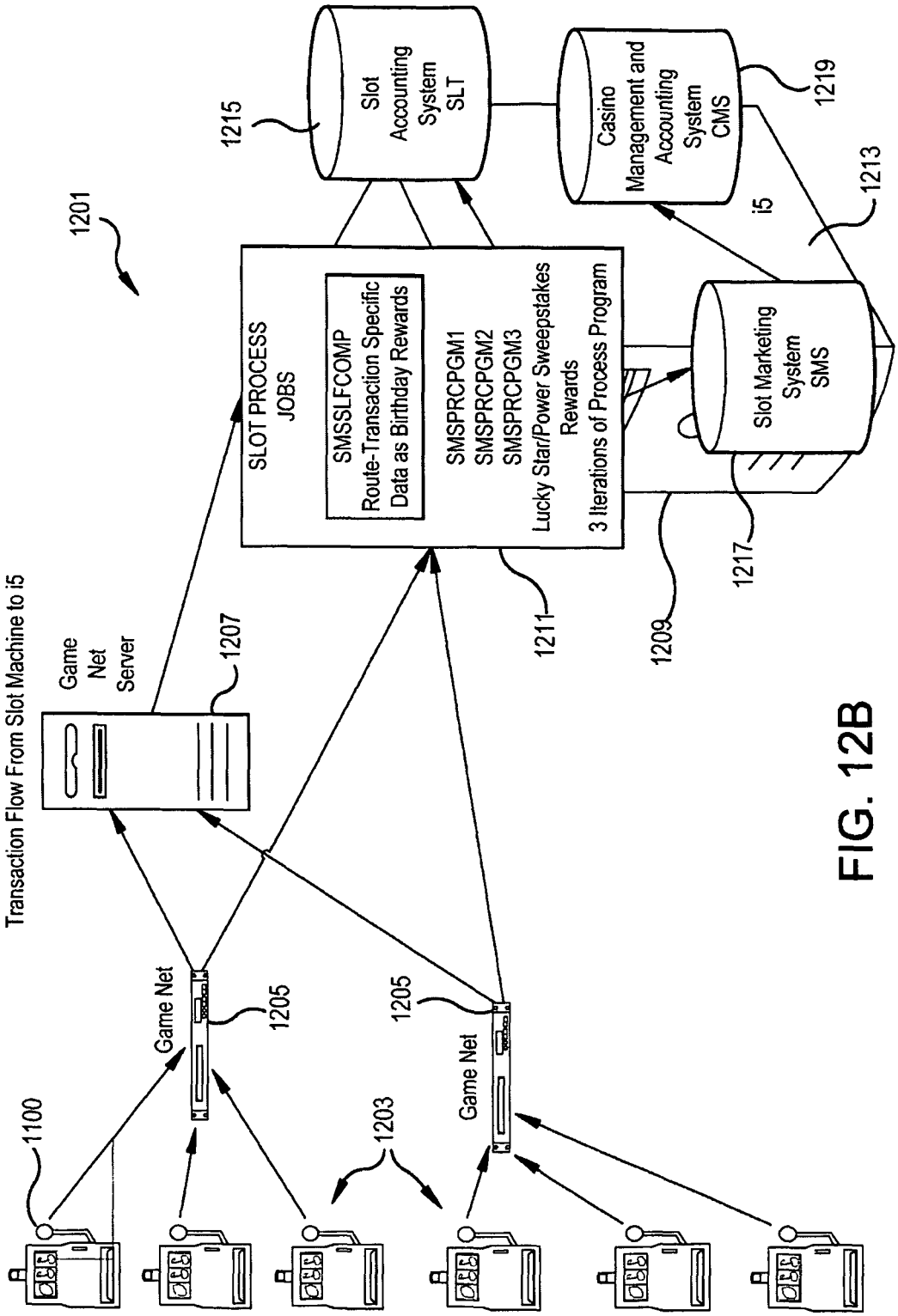

Transaction Flow From Slot Machine to i5
1201
1215
Slot Accounting System SLT
Casino Management and Accounting System CMS
1219
1213
i5
SLOT PROCESS JOBS
SMSSLFCOMP Route-Transaction Specific Data as Birthday Rewards
SMSPRCPGM1
SMSPRCPGM2
SMSPRCPGM3
Lucky Star/Power Sweepstakes Rewards
3 Iterations of Process Program
Slot Marketing System SMS
1217
1209
1211
Game Net Server
1207
Game Net
1205
1205
Game Net
1203
1100

FIG. 12B

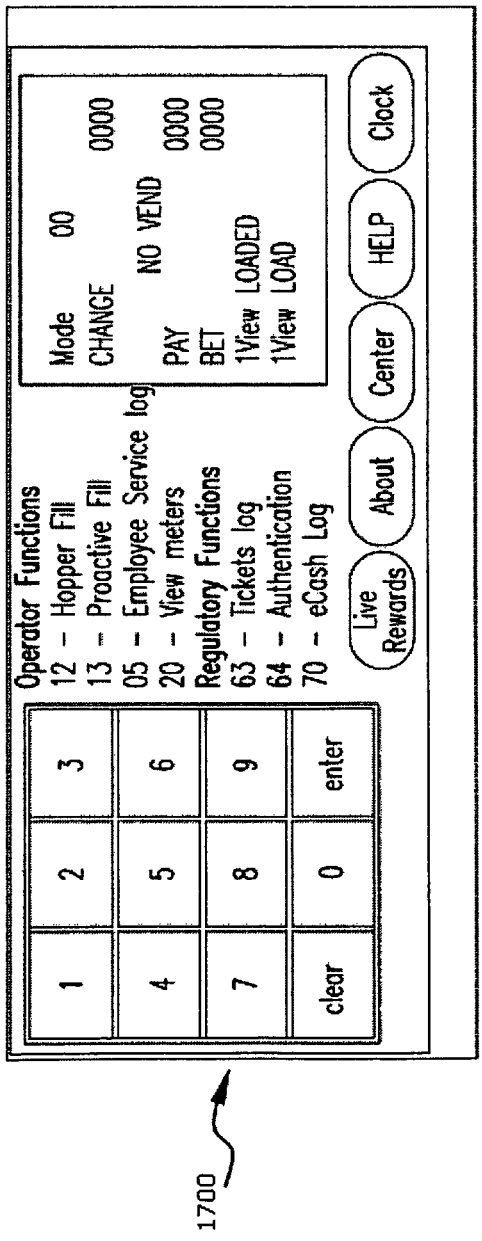

Operator Functions
12 – Hopper Fill
13 – Proactive Fill
05 – Employee Service log
20 – View meters
Regulatory Functions
63 – Tickets log
64 – Authentication
70 – eCash Log
Mode 00
CHANGE 0000
NO VEND
PAY 0000
BET 0000
1View LOADED
1View LOAD
Live Rewards
About
Center
HELP
Clock
1 2 3
4 5 6
7 8 9
clear 0 enter
1700

FIG. 13

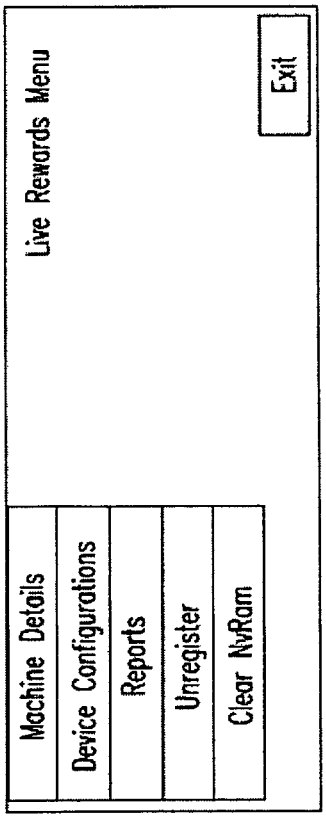

Live Rewards Menu
Machine Details
Device Configurations
Reports
Unregister
Clear NvRam
Exit
1702

FIG. 14

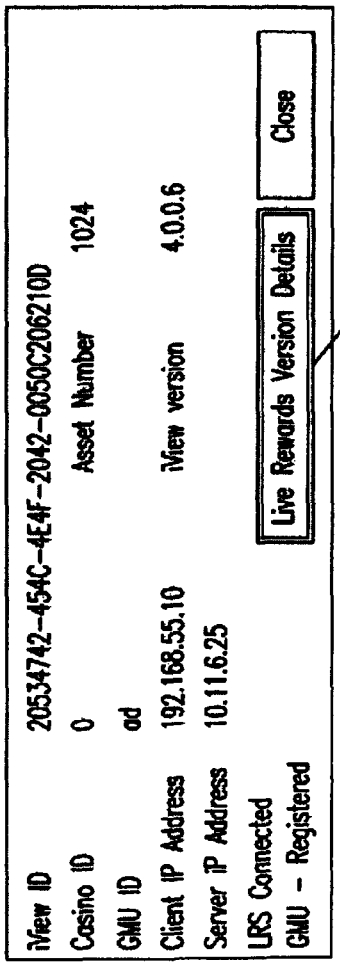

1800
iView ID 20534742-454C-4E4F-2042-0050C206210D
Casino ID 0 Asset Number 1024
GMU ID od
Client IP Address 192.168.55.10 iView version 4.0.0.6
Server IP Address 10.11.6.25
LRS Connected
GMU - Registered
Live Rewards Version Details
Close

FIG. 15

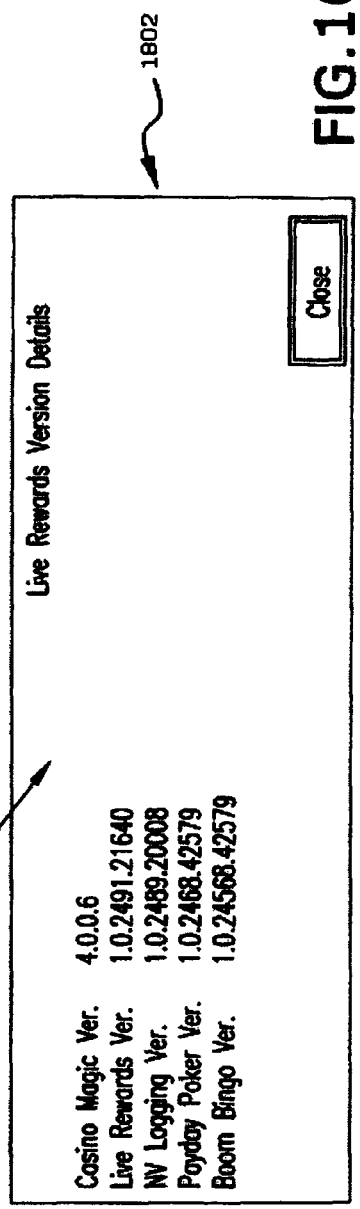

1802
Live Rewards Version Details
Casino Magic Ver. 4.0.0.6
Live Rewards Ver. 1.0.2491.21640
NV Logging Ver. 1.0.2489.20008
Payday Poker Ver. 1.0.2468.42579
Boom Bingo Ver. 1.0.24568.42579
Close

FIG. 16

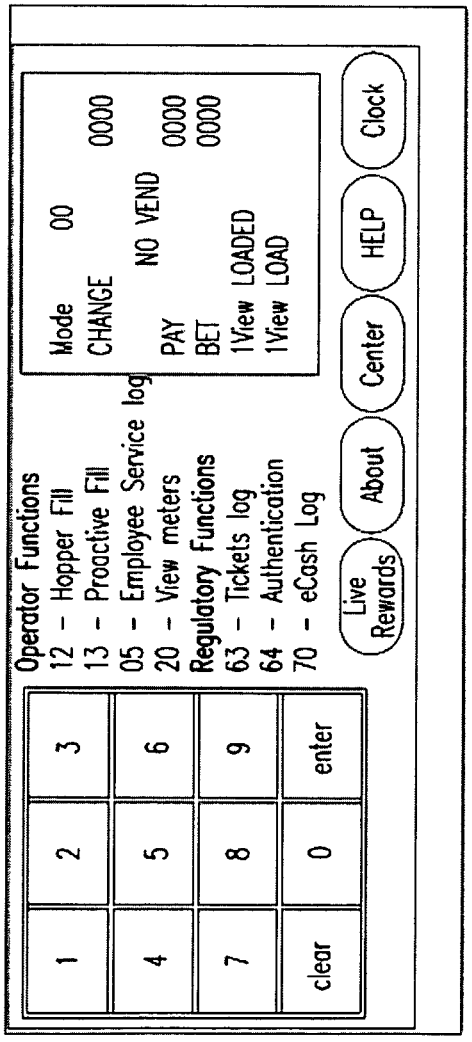


FIG. 17A

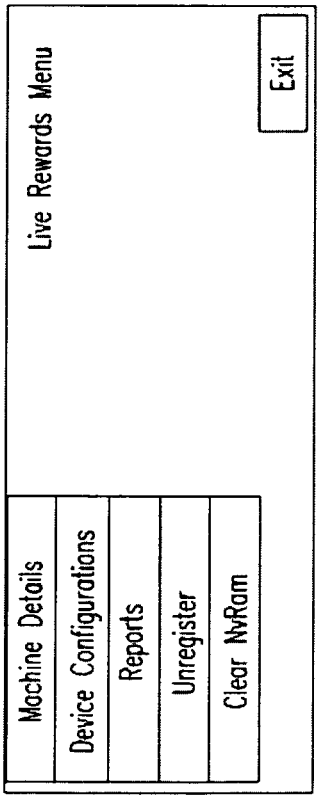


FIG. 17B

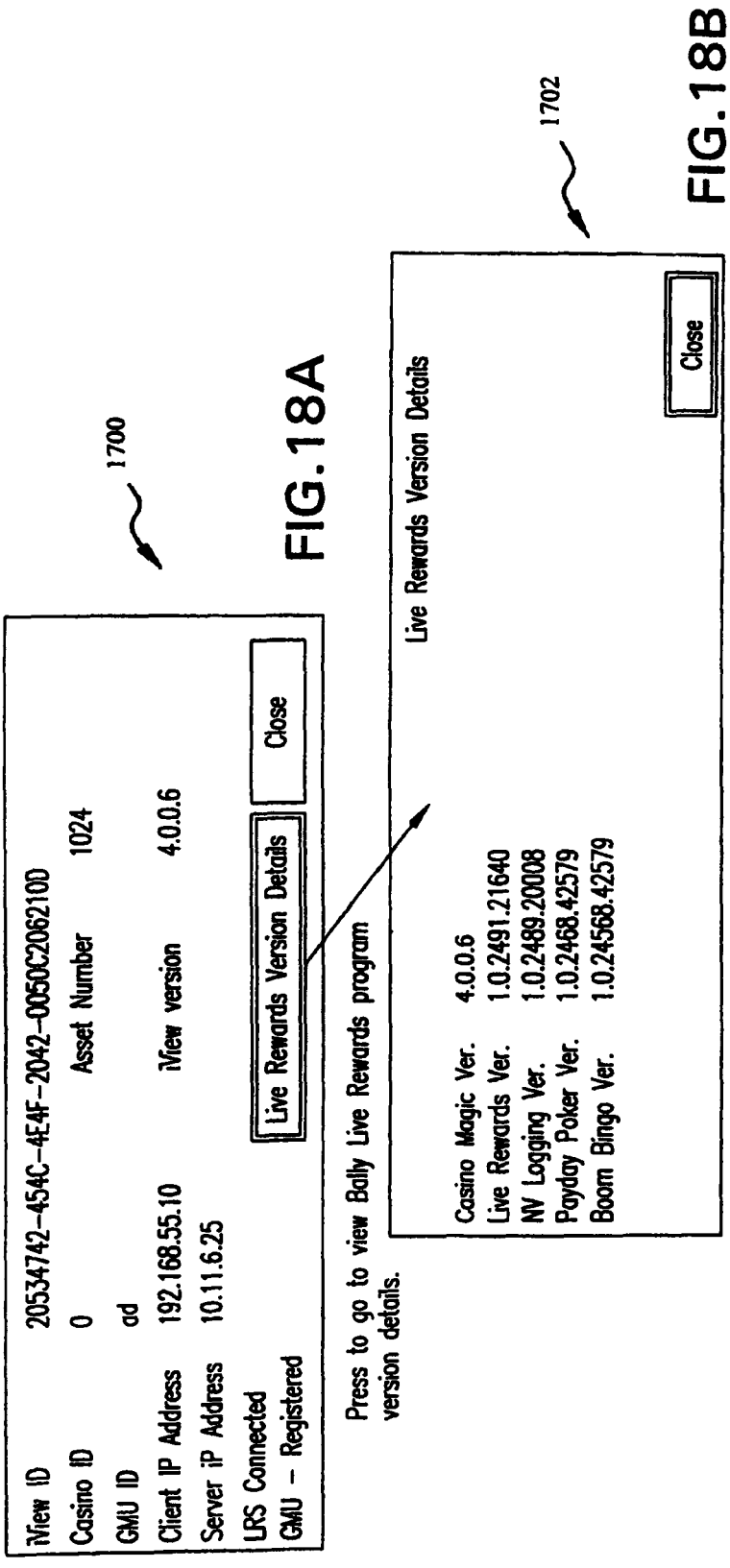


FIG.18A

FIG.18B

1804

Field	Description
Asset Number	Slot machine identification number.
Casino ID	Unique, 3-digit property identifier.
Client IP Address	Network address of the IVIEW.
GMU ID	Unique identification number of the Game Monitoring Unit (GMU). This number is assigned by the Slot Management System upon initial connection.
IVIEW ID	Unique number used to identify the IVIEW device. This number is a manufacturer-assigned value.
IVIEW Version	Version of code currently installed on the IVIEW device.
Field	Description
LRS	Status of the Live Rewards Server (LRS) that the IVIEW is communicating with. Status: Connected or Not Connected.
GMU =	Status of IVIEW connection to the Game Monitoring Unit (GMU) - Connected or Not Connected.
Server IP Address	Network location of the Bally Live Rewards server.

FIG.18C

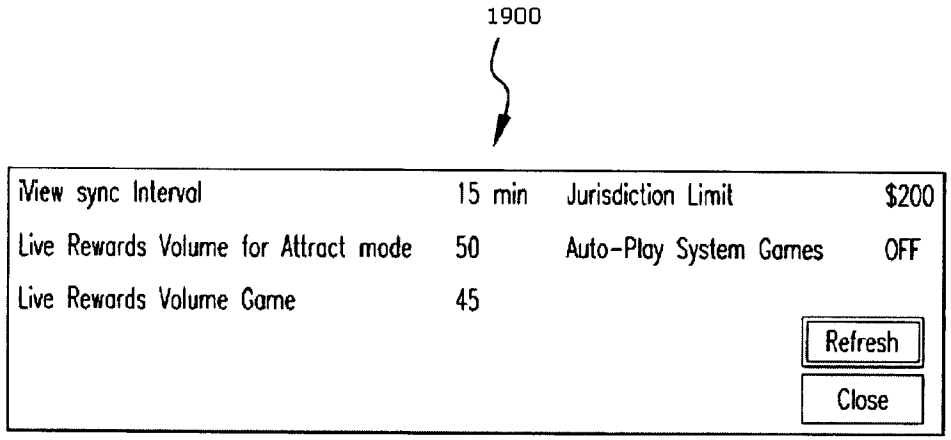


FIG.19A

Field	Description
Auto-Play System Games	Determines whether a randomly selected Bally Live Rewards game plays automatically once the player has accrued enough play points. This setting is defined through the LRS, under Global Settings
iVIEW Sync Interval	Defines the number of minutes between each IVIEW synchronization with the LRS to download global settings. These settings are defined through the LRS, under Global Settings.
Jurisdiction Limit	Indicates the jurisdictional limit for handpaid jackpots. This setting is defined through the LRS, under Global Settings.
System Game Volume for Attract Mode	Volume setting for attract movie. This setting is defined through the LRS, under Global Settings.
System Game Volume Game	Volume setting for Bally Live Rewards games. This setting is defined through the LRS, under Global Settings.

1902

FIG.19B

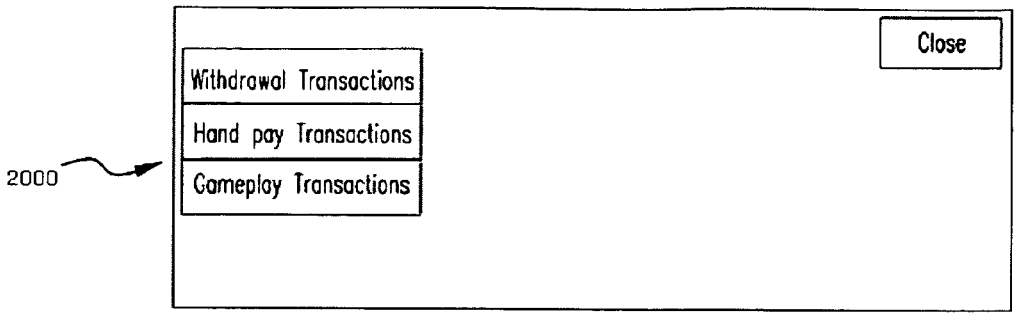


FIG.20A

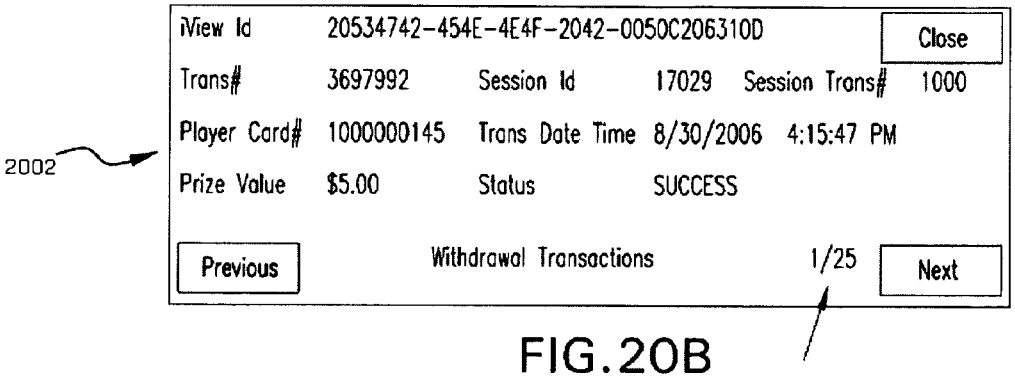


FIG.20B

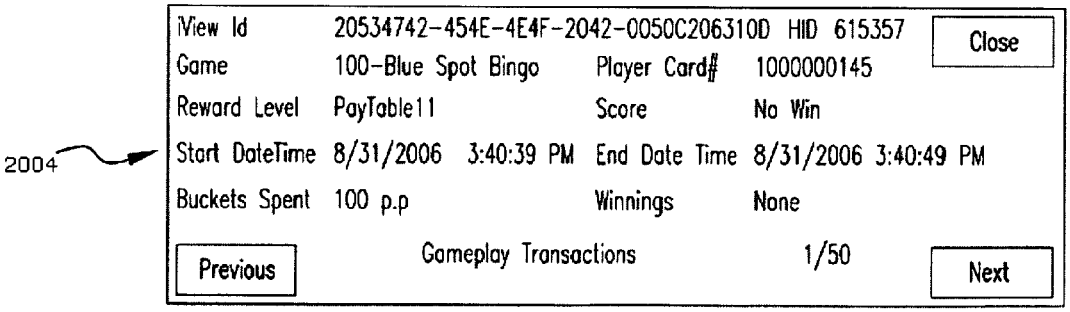


FIG.20C

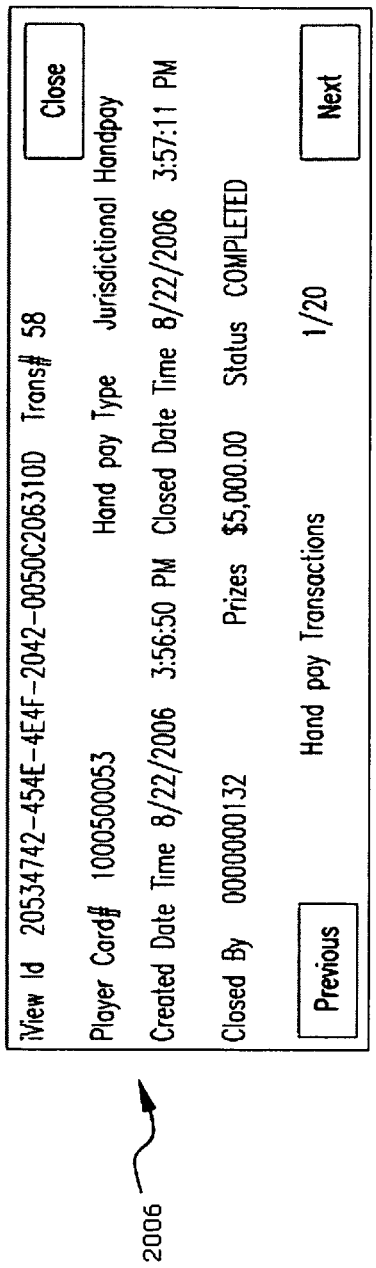

View Id 20534742-454E-4E4F-2042-0050C2063100 Trans# 58
Close
Player Card# 1000500053
Hand pay Type Jurisdictional Handpay
Created Date Time 8/22/2006 3:56:50 PM Closed Date Time 8/22/2006 3:57:11 PM
Closed By 0000000132
Prizes $5,000.00 Status COMPLETED
Previous
Hand pay Transactions
1/20
Next
2006

FIG.20D

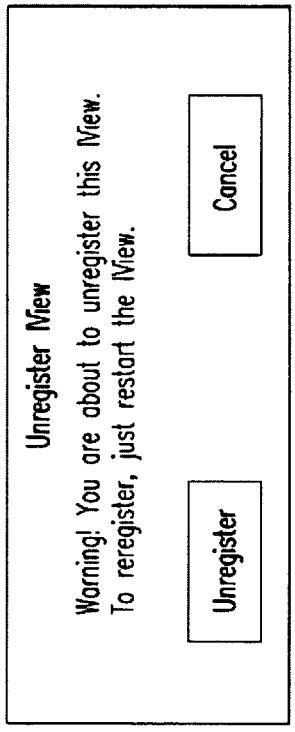


FIG.21A

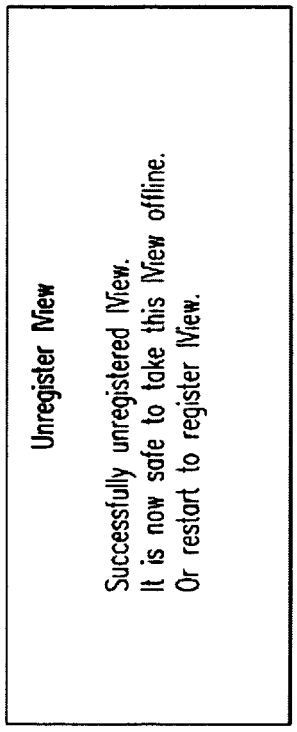


FIG.21B

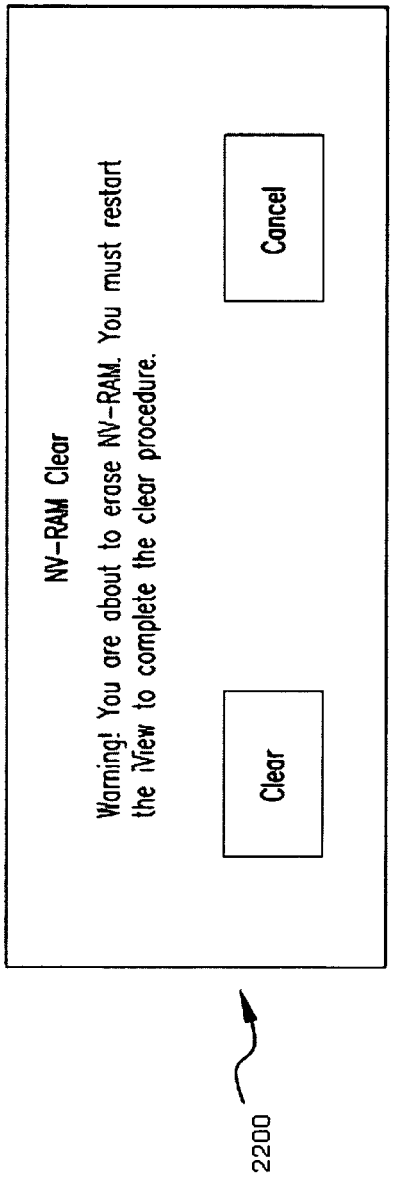

NV-RAM Clear
Warning! You are about to erase NV-RAM. You must restart the iView to complete the clear procedure.
Clear
Cancel
2200

FIG.22

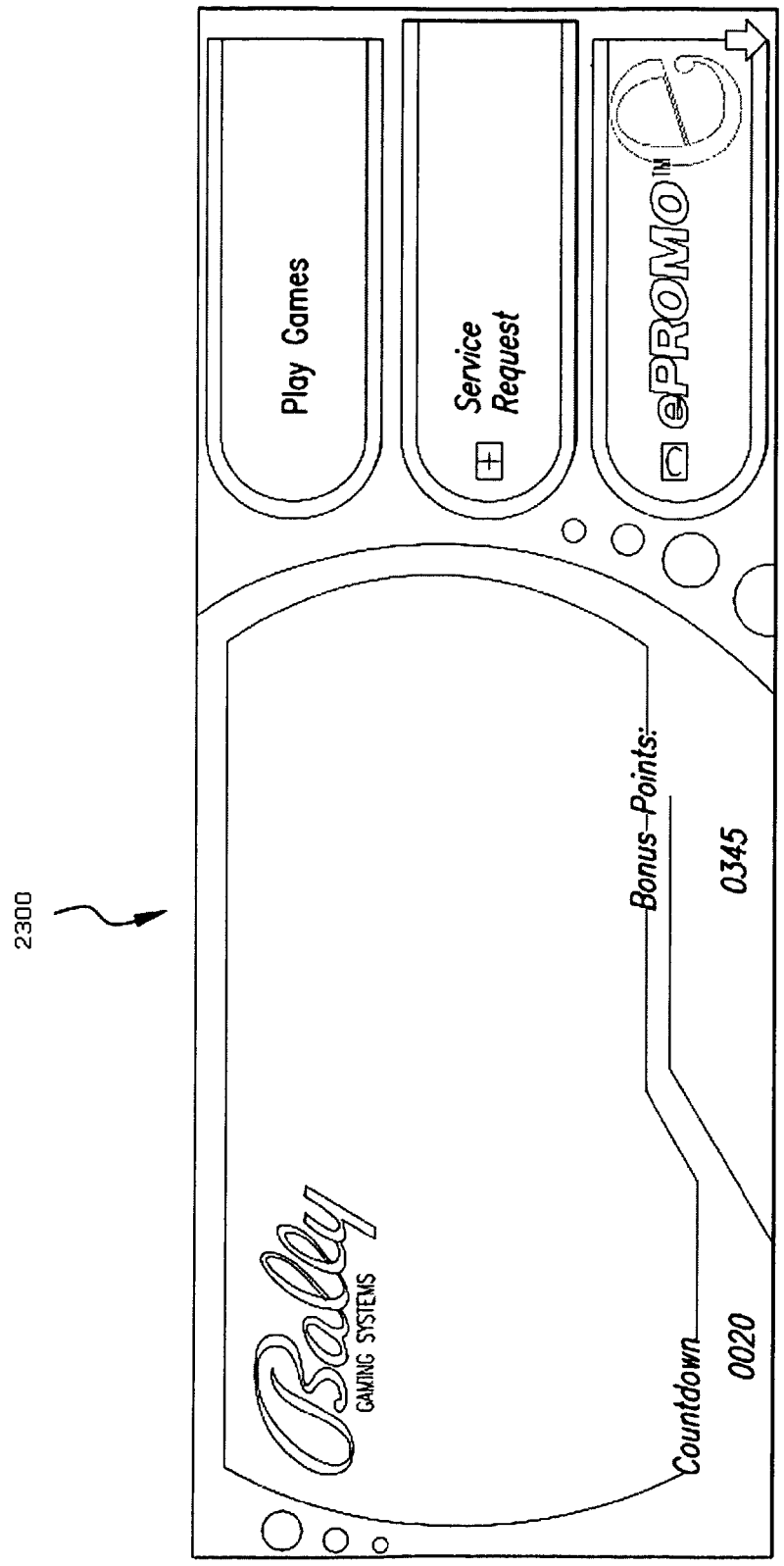

2300
Play Games
Service Request
ePROMO
Bonus Points:
0345
Countdown
0020
Bally
GAMING SYSTEMS

FIG. 23

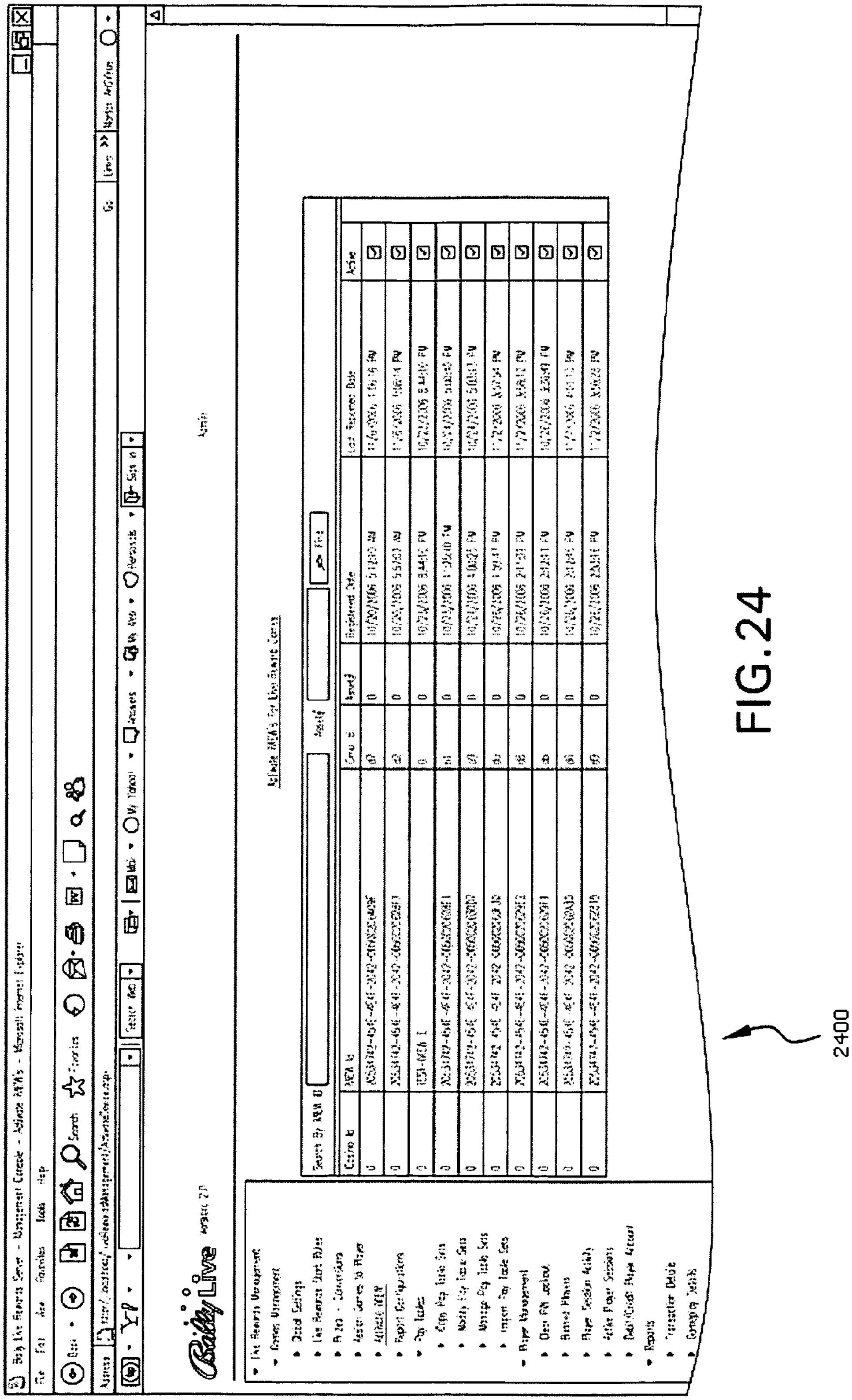
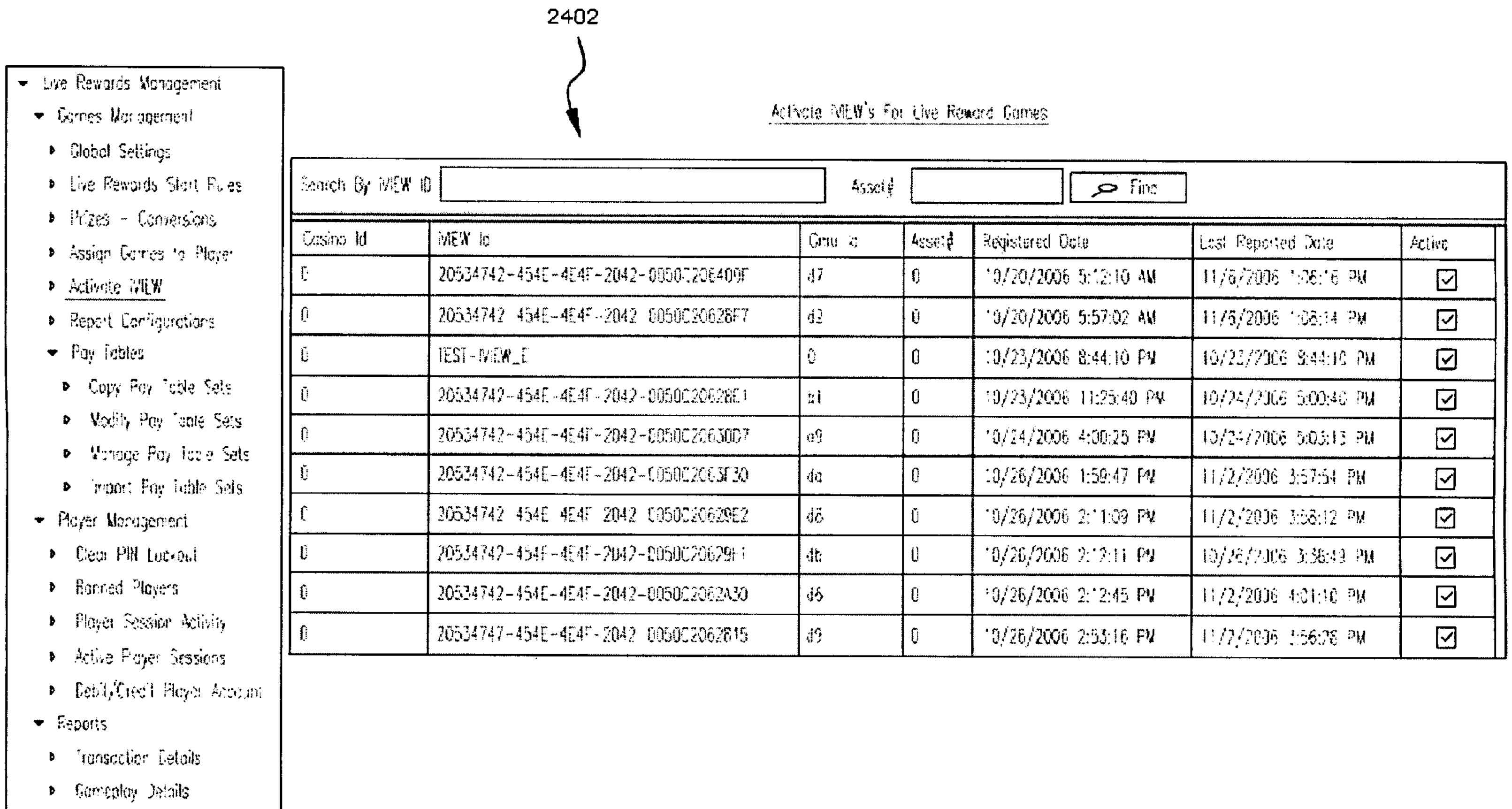


FIG.24



Casino Id	MEW Id	Gmu Id	Asset#	Registered Date	Last Reported Date	Active
0	20534742-454E-4E4F-2042-0050C206409F	d7	0	10/20/2006 5:12:10 AM	11/6/2006 1:26:16 PM	☑
0	20534742-454E-4E4F-2042-0050C20628F7	d2	0	10/20/2006 5:57:02 AM	11/6/2006 1:08:14 PM	☑
0	TEST-MEW_E	0	0	10/23/2006 8:44:10 PM	10/23/2006 8:44:10 PM	☑
0	20534742-454E-4E4F-2042-0050C20628E1	e1	0	10/23/2006 11:25:40 PM	10/24/2006 5:00:46 PM	☑
0	20534742-454E-4E4F-2042-0050C20630D7	e9	0	10/24/2006 4:00:25 PM	10/24/2006 5:03:13 PM	☑
0	20534742-454E-4E4F-2042-0050C2063F30	da	0	10/26/2006 1:59:47 PM	11/2/2006 3:57:54 PM	☑
0	20534742-454E-4E4F-2042-0050C20629E2	d6	0	10/26/2006 2:11:09 PM	11/2/2006 3:58:12 PM	☑
0	20534742-454E-4E4F-2042-0050C20629F1	db	0	10/26/2006 2:12:11 PM	10/26/2006 3:36:49 PM	☑
0	20534742-454E-4E4F-2042-0050C2062A30	d6	0	10/26/2006 2:12:45 PM	11/2/2006 4:01:10 PM	☑
0	20534747-454E-4E4F-2042-0050C2062815	d9	0	10/26/2006 2:55:16 PM	11/7/2006 1:56:28 PM	☑

FIG.24A

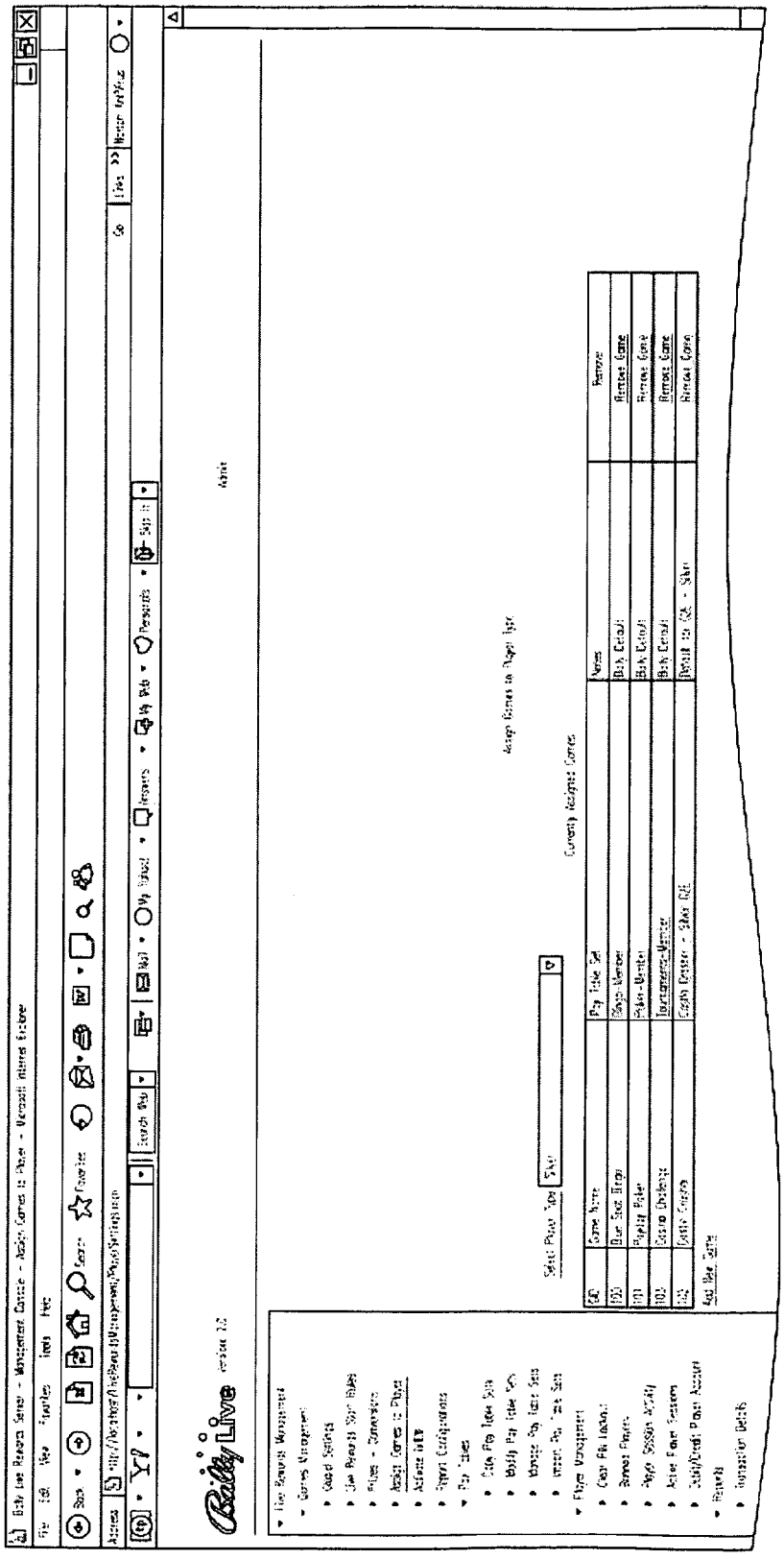


FIG. 25

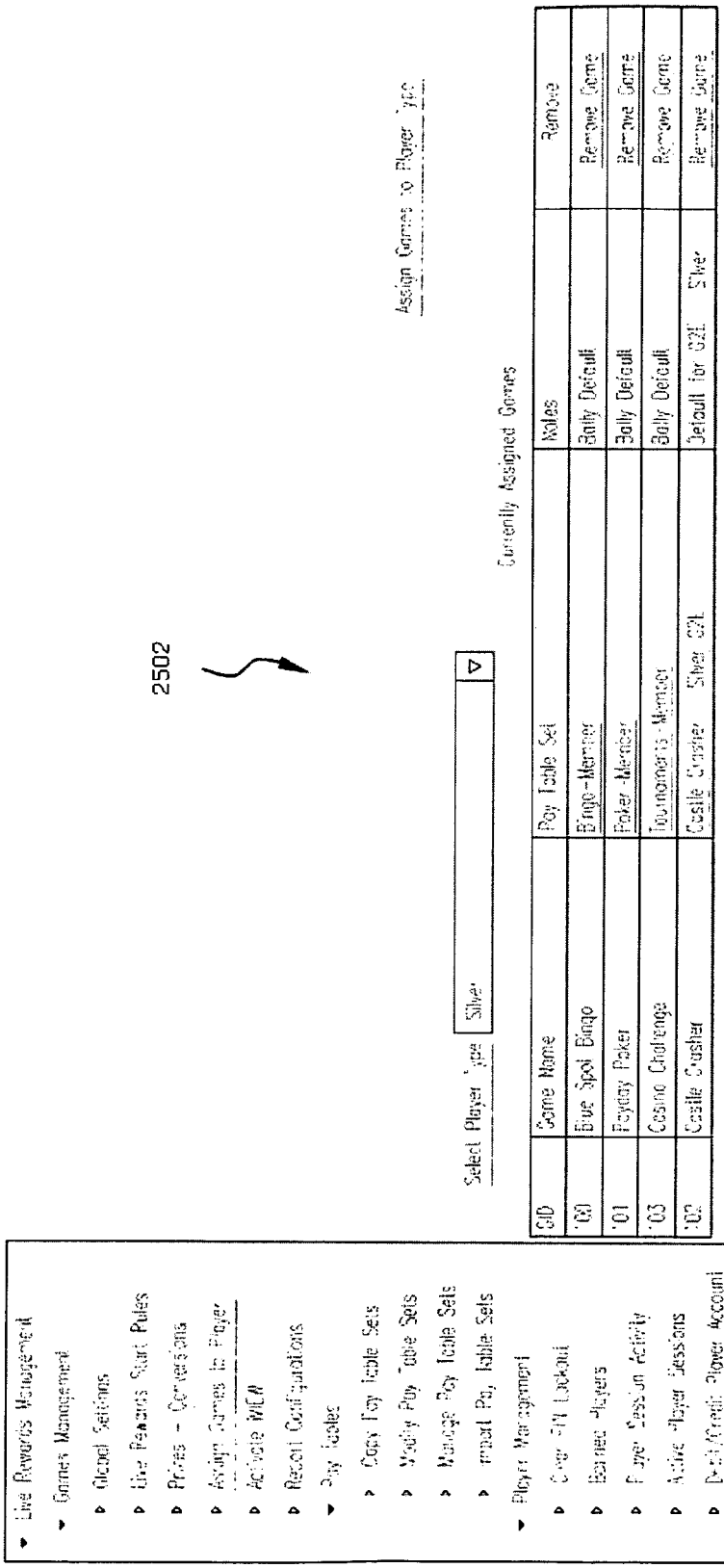

Live Rewards Management
Games Management
Global Settings
Live Rewards Start Rules
Prizes – Conversions
Assign Games to Player
Activate WDM
Reset Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Cover PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
2502
Assign Games to Player Type
Select Player Type
Silver
Currently Assigned Games
GID
Game Name
Pay Table Set
Notes
Remove
100
Blue Spot Bingo
Bingo-Member
Bally Default
Remove Game
101
Payday Poker
Poker-Member
Bally Default
Remove Game
103
Casino Challenge
Tournaments-Member
Bally Default
Remove Game
102
Castle Crasher
Castle Crasher - Silver G2E
Default for G2E - Silver
Remove Game
Add New Game

FIG.25A

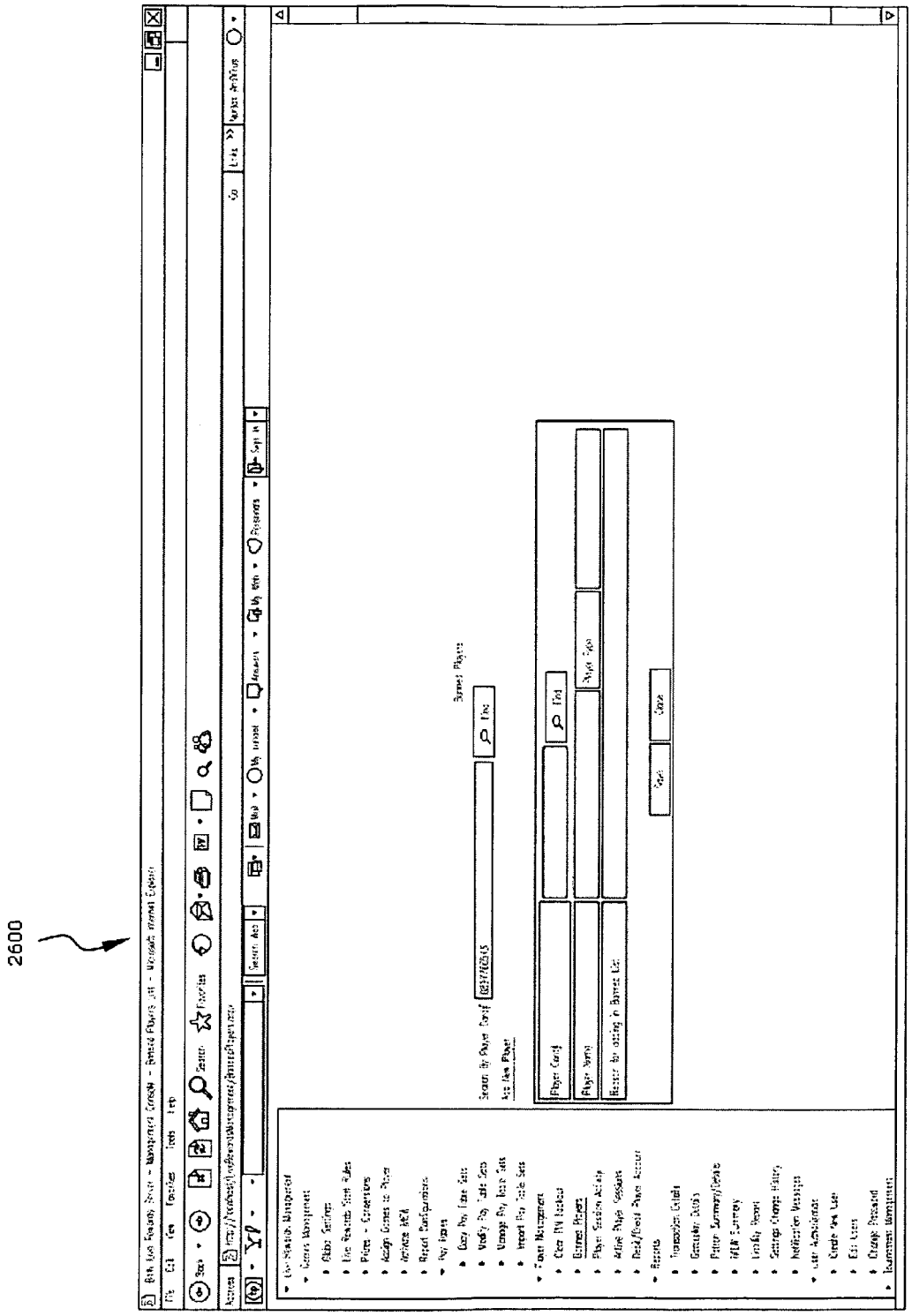


FIG.26

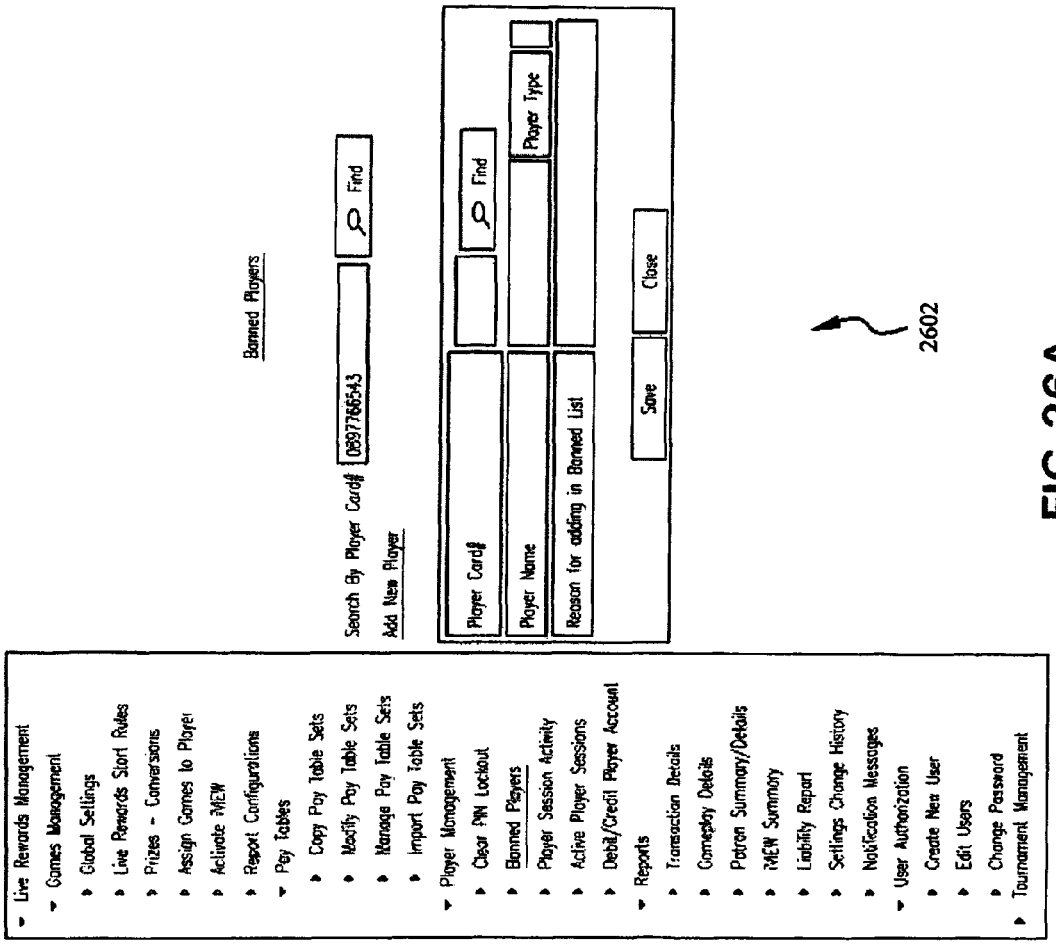

Live Rewards Management
Games Management
Global Settings
Live Rewards Start Rules
Prizes - Conversions
Assign Games to Player
Activate iMEW
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Gameplay Details
Patron Summary/Details
iMEW Summary
Liability Report
Settings Change History
Notification Messages
User Authorization
Create New User
Edit Users
Change Password
Tournament Management
Banned Players
Search By Player Card# 0897765543
Find
Add New Player
Player Card#
Find
Player Name
Player Type
Reason for adding in Banned List
Save
Close
2602

FIG.26A

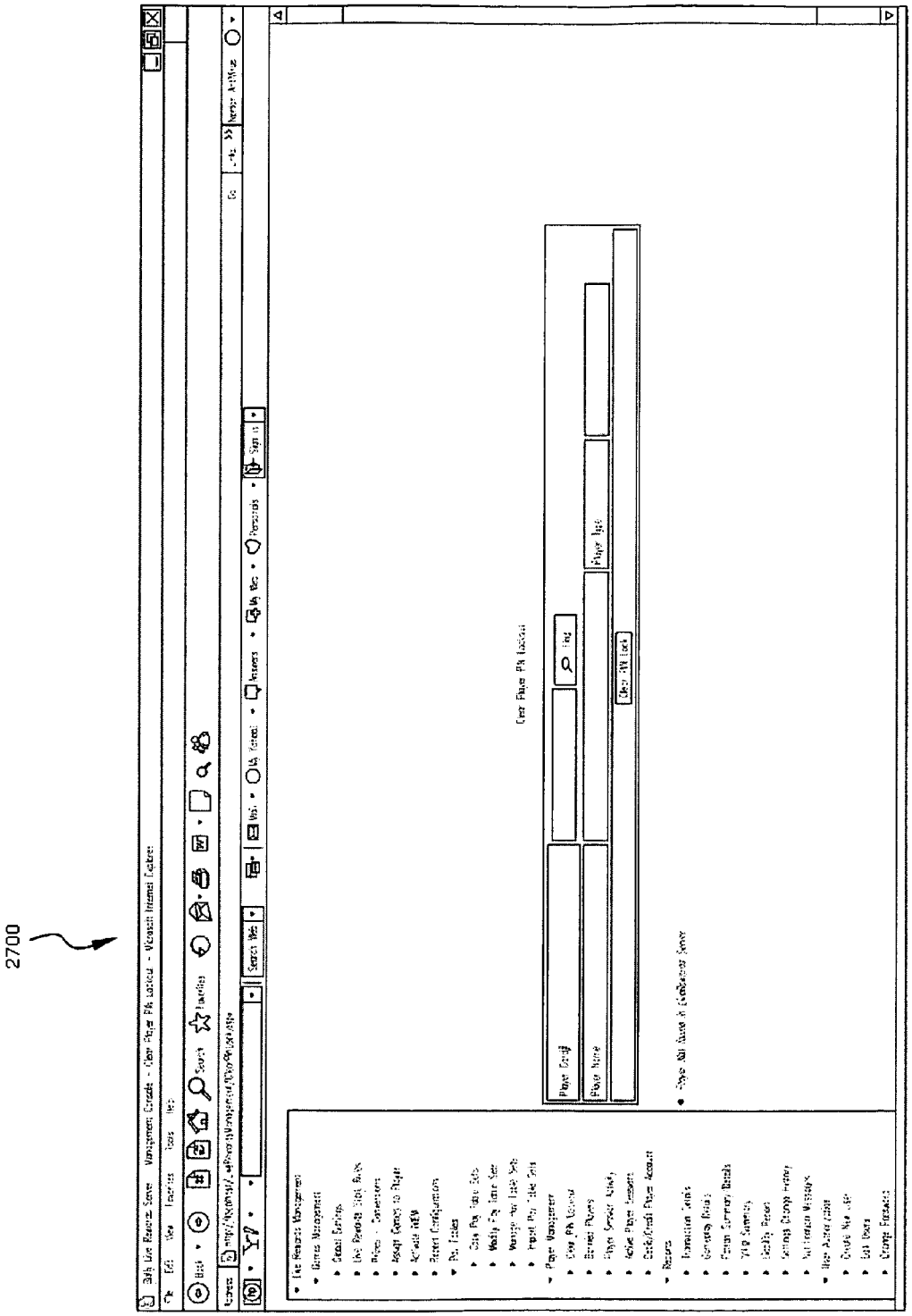


FIG.27

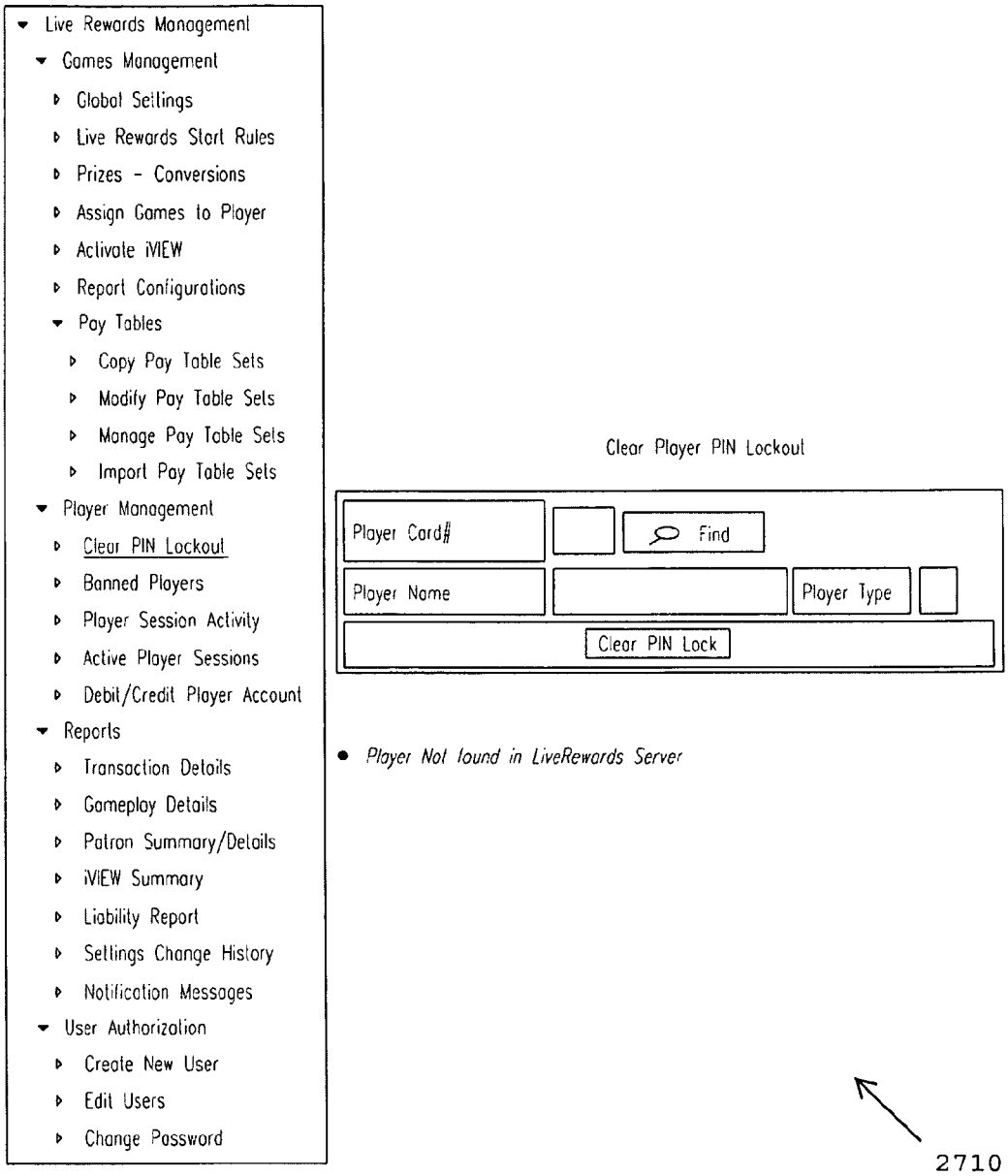

Live Rewards Management
Games Management
Global Settings
Live Rewards Start Rules
Prizes - Conversions
Assign Games to Player
Activate iVIEW
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Gameplay Details
Patron Summary/Details
iVIEW Summary
Liability Report
Settings Change History
Notification Messages
User Authorization
Create New User
Edit Users
Change Password
Clear Player PIN Lockout
Player Card#
Find
Player Name
Player Type
Clear PIN Lock
Player Not found in LiveRewards Server
2710

FIG.27A

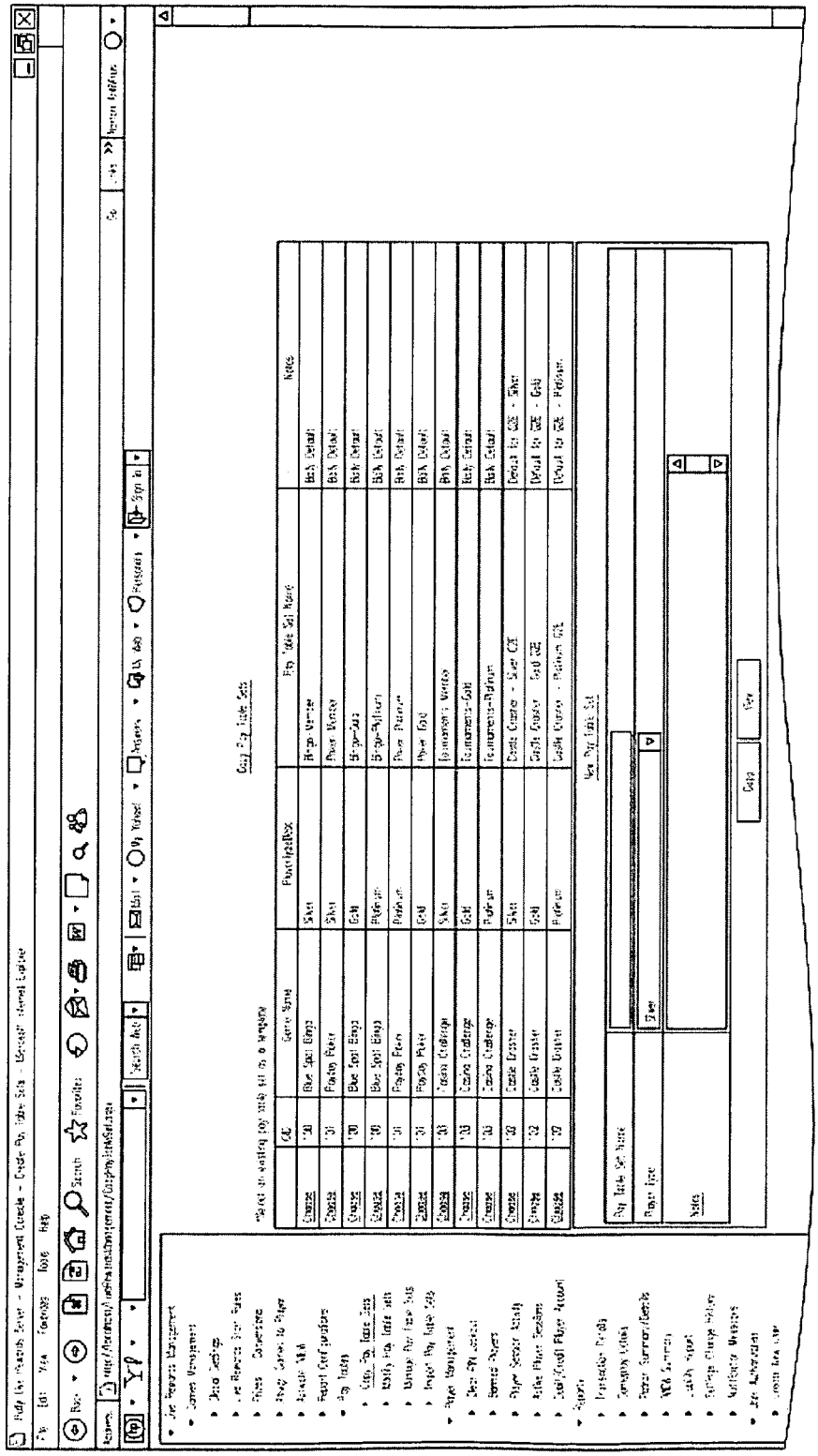


FIG.28

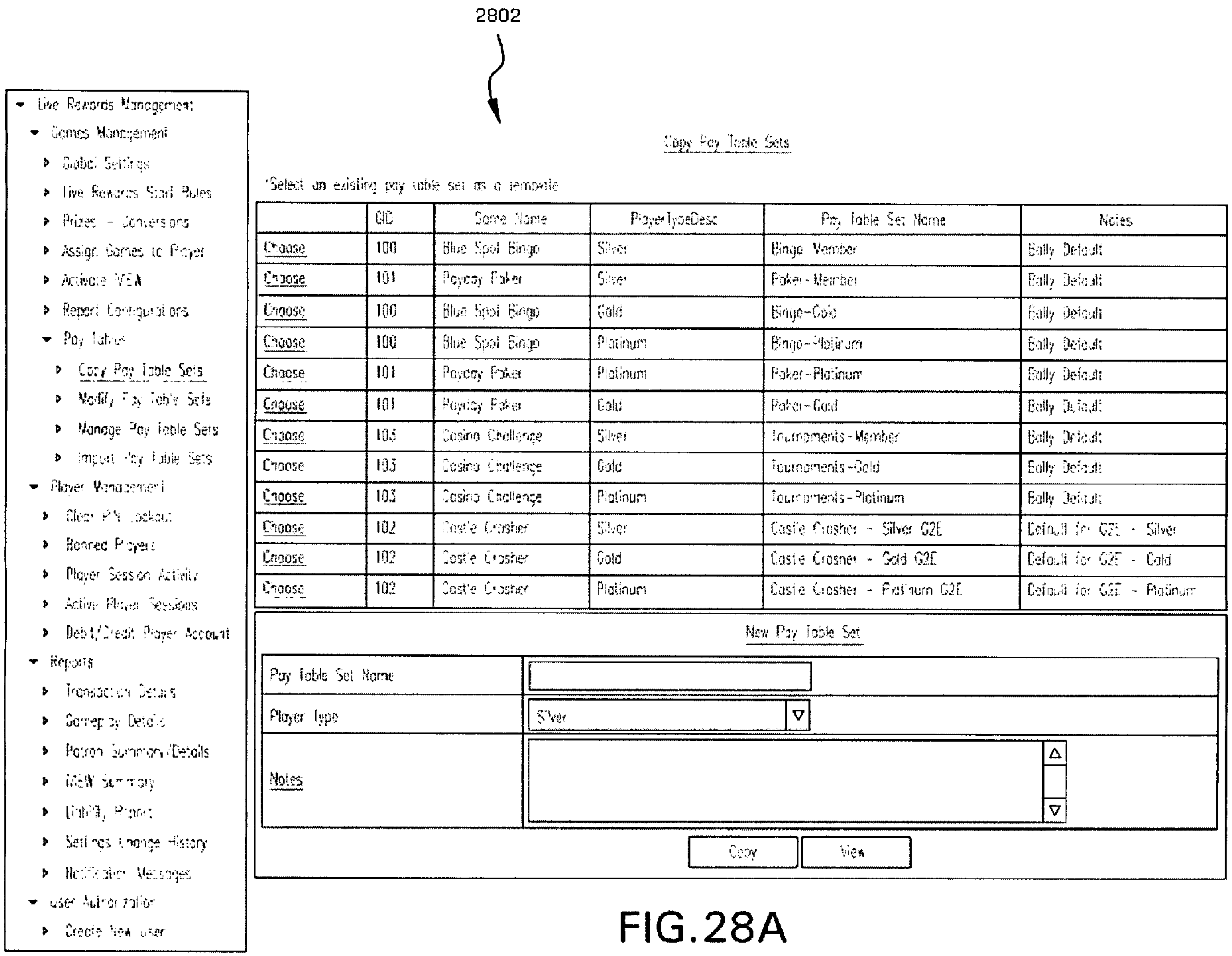

2802
Live Rewards Management
Games Management
Global Settings
Live Rewards Stat Rules
Prizes - Conversions
Assign Games to Player
Activate VEA
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Gameplay Details
Patron Summary/Details
MEW Summary
Unit/Pj Project
Settings Change History
Notification Messages
User Authorization
Create New User
Copy Pay Table Sets
*Select an existing pay table set as a template
GID
Game Name
PlayerTypeDesc
Pay Table Set Name
Notes
Choose 100 Blue Spot Bingo Silver Bingo Member Bally Default
Choose 101 Payday Poker Silver Poker-Member Bally Default
Choose 100 Blue Spot Bingo Gold Bingo-Gold Bally Default
Choose 100 Blue Spot Bingo Platinum Bingo-Platinum Bally Default
Choose 101 Payday Poker Platinum Poker-Platinum Bally Default
Choose 101 Payday Poker Gold Poker-Gold Bally Default
Choose 103 Casino Challenge Silver Tournaments-Member Bally Default
Choose 103 Casino Challenge Gold Tournaments-Gold Bally Default
Choose 103 Casino Challenge Platinum Tournaments-Platinum Bally Default
Choose 102 Castle Crasher Silver Castle Crasher - Silver G2E Default for G2E - Silver
Choose 102 Castle Crasher Gold Castle Crasher - Gold G2E Default for G2E - Gold
Choose 102 Castle Crasher Platinum Castle Crasher - Platinum G2E Default for G2E - Platinum
New Pay Table Set
Pay Table Set Name
Player Type
Silver
Notes
Copy
View

FIG.28A

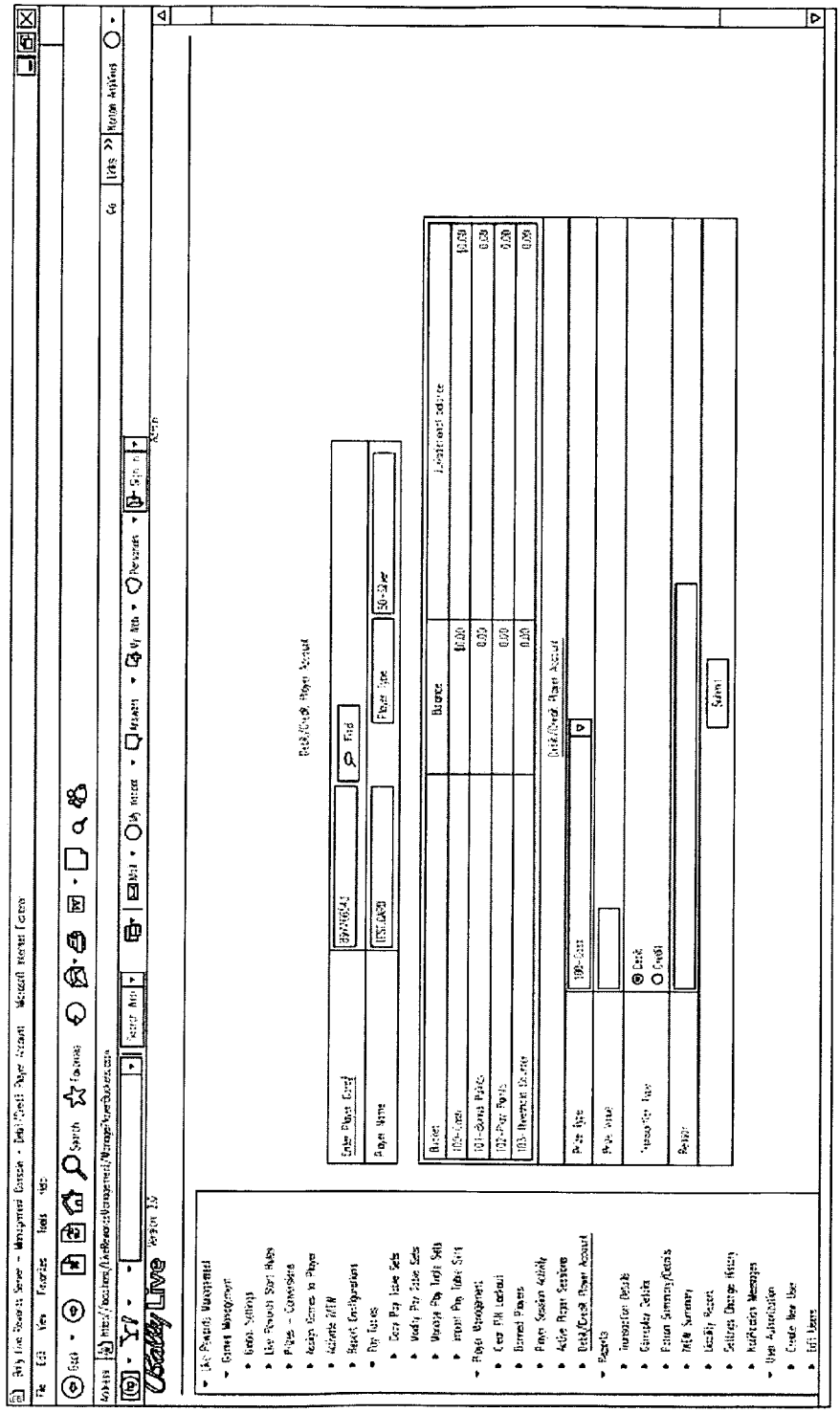


FIG.29

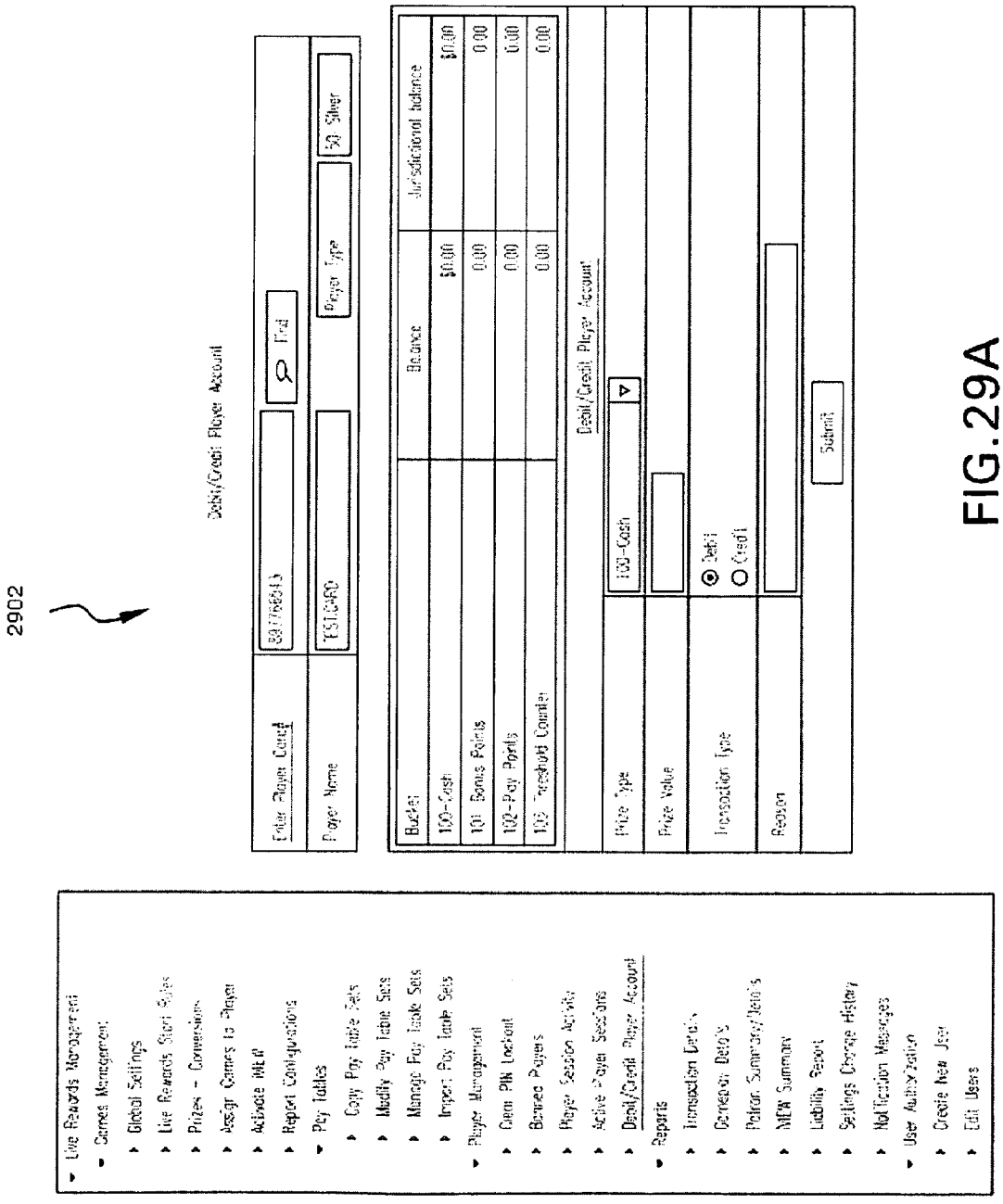

2902
Debit/Credit Player Account
Enter Player Card#
Find
Player Name
Player Type
30 Silver
Bucket
Balance
Jurisdictional Balance
100-Cash
$0.00
$0.00
101 Bonus Points
0.00
0.00
102-Play Points
0.00
0.00
103 Tradeup Counter
0.00
0.00
Debit/Credit Player Account
Prize Type
100-Cash
Prize Value
Transaction Type
Debit
Credit
Reason
Submit
Live Rewards Management
Games Management
Global Settings
Live Rewards Start Sales
Prizes - Conversion
Assign Games to Player
Activate MEM
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Bonus Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Conversion Details
Patron Summary/Details
MEM Summary
Liability Report
Settings Change History
Notification Messages
User Administration
Create New User
Edit Users

FIG.29A

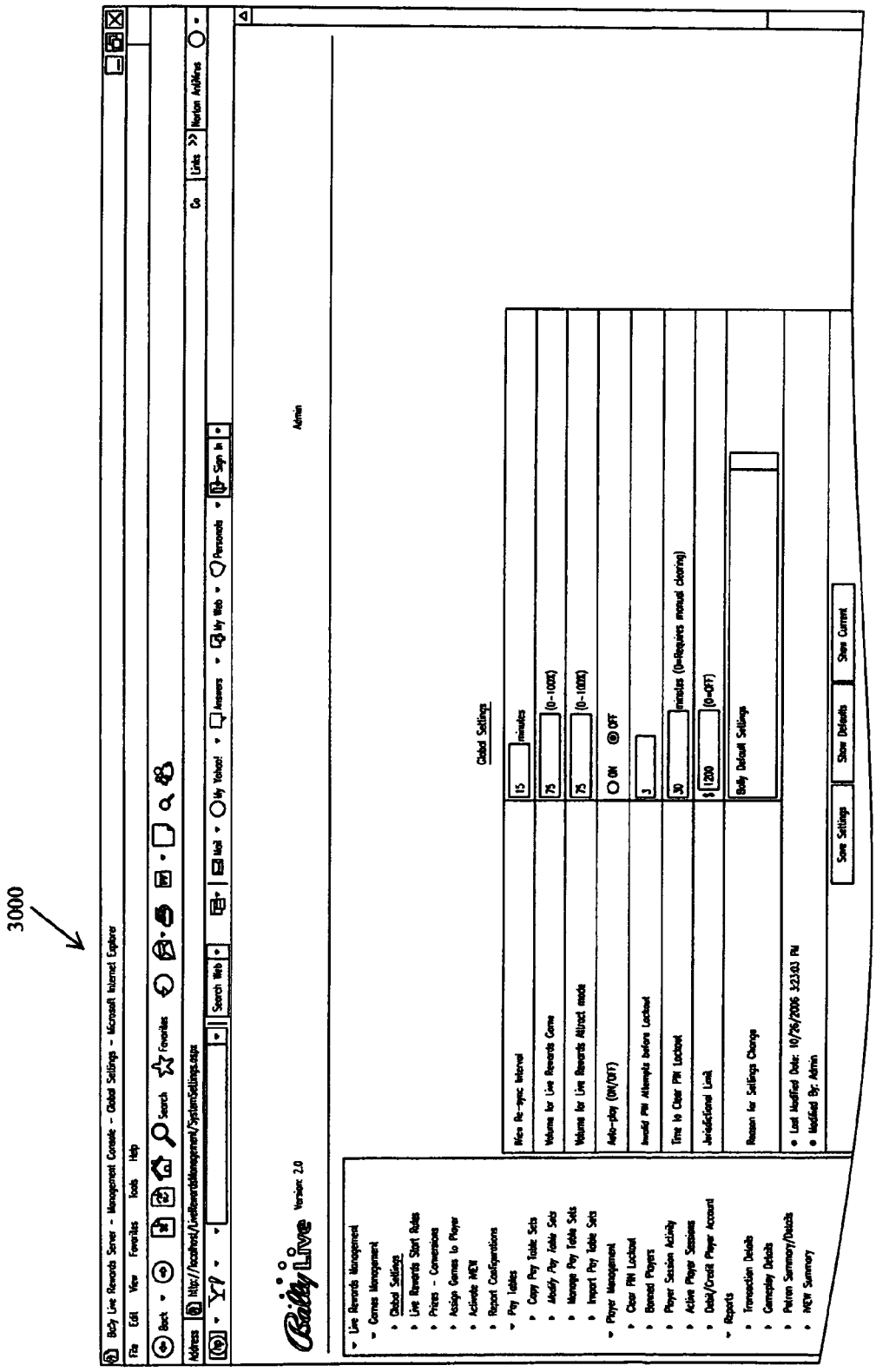

3000
Bally Live Rewards Server - Management Console - Global Settings - Microsoft Internet Explorer
Bally Live Version 2.0
Admin
Live Rewards Management
Games Management
Global Settings
Live Rewards Start Rules
Prizes - Conversions
Assign Games to Player
Activate MEW
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Gameplay Details
Patron Summary/Details
MEW Summary
Global Settings
Xfer Re-sync Interval
15
minutes
Volume for Live Rewards Game
75
(0-100%)
Volume for Live Rewards Attract mode
75
(0-100%)
Auto-play (ON/OFF)
ON
OFF
Invalid PIN Attempts before Lockout
3
Time to Clear PIN Lockout
30
minutes (0=Requires manual clearing)
Jurisdictional Limit
$ 200
(0=OFF)
Reason for Settings Change
Bally Default Settings
Last Modified Date: 10/26/2006 3:21:03 PM
Modified By: Admin
Save Settings
Show Defaults
Show Current

FIG.30

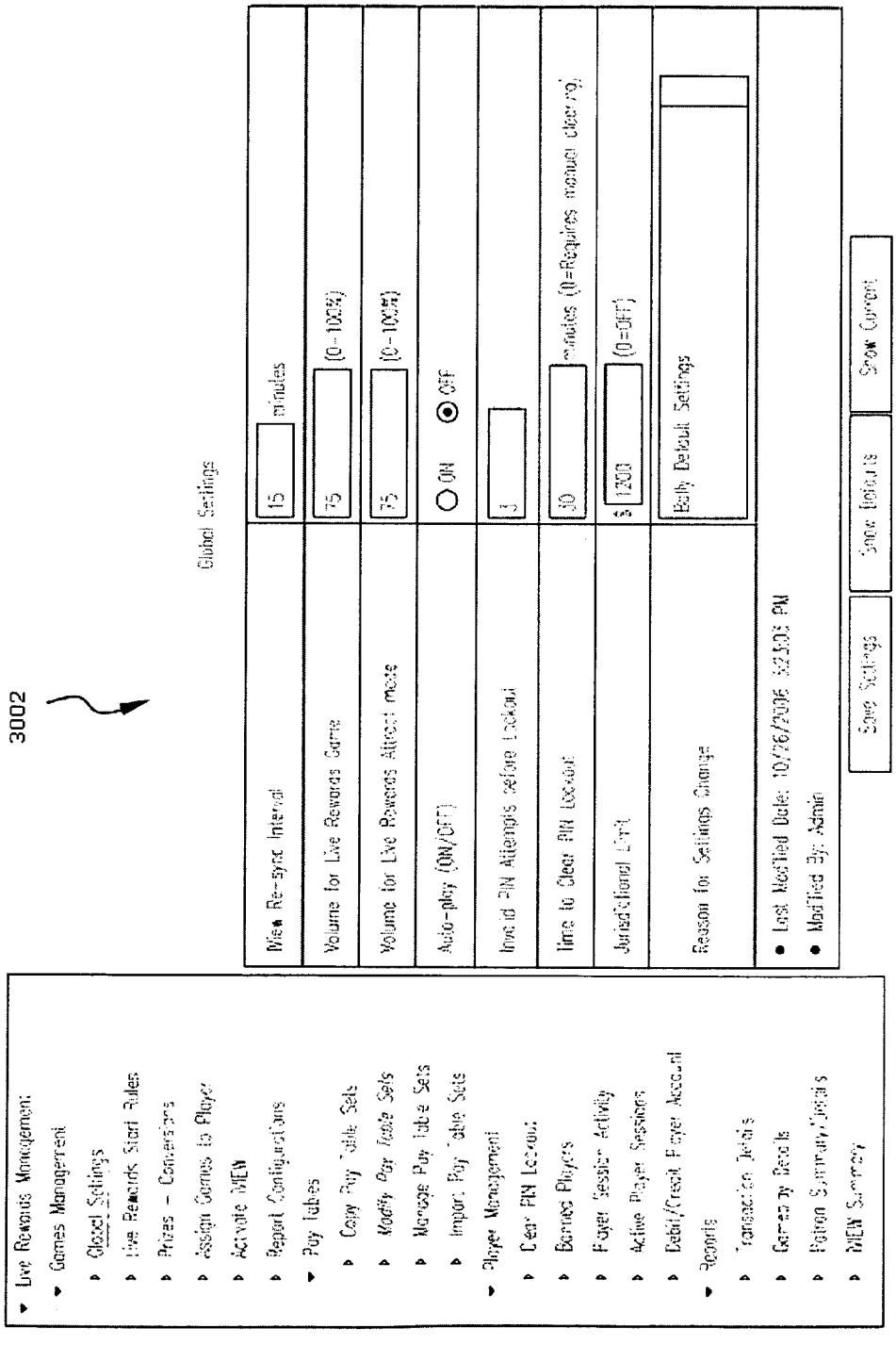

3002
Live Rewards Management
Games Management
Global Settings
Live Rewards Start Rules
Prizes – Conversions
Assign Games to Player
Activate MEN
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Game Play Reports
Patron Summary Details
MEN Summary
Global Settings
MEN Re-sync Interval
15
minutes
Volume for Live Rewards Game
75
(0-100%)
Volume for Live Rewards Attract mode
75
(0-100%)
Auto-play (ON/OFF)
ON
OFF
Invalid PIN Attempts before Lockout
3
Time to Clear PIN Lockout
30
minutes (0=Requires manual clearing)
Jurisdictional Limit
$ 1200
(0=Off)
Reason for Settings Change
Daily Default Settings
Last Modified Date: 10/26/2006 12:10:30 PM
Modified By: Admin
Save Settings
Reset Defaults
Show Current

FIG.30A

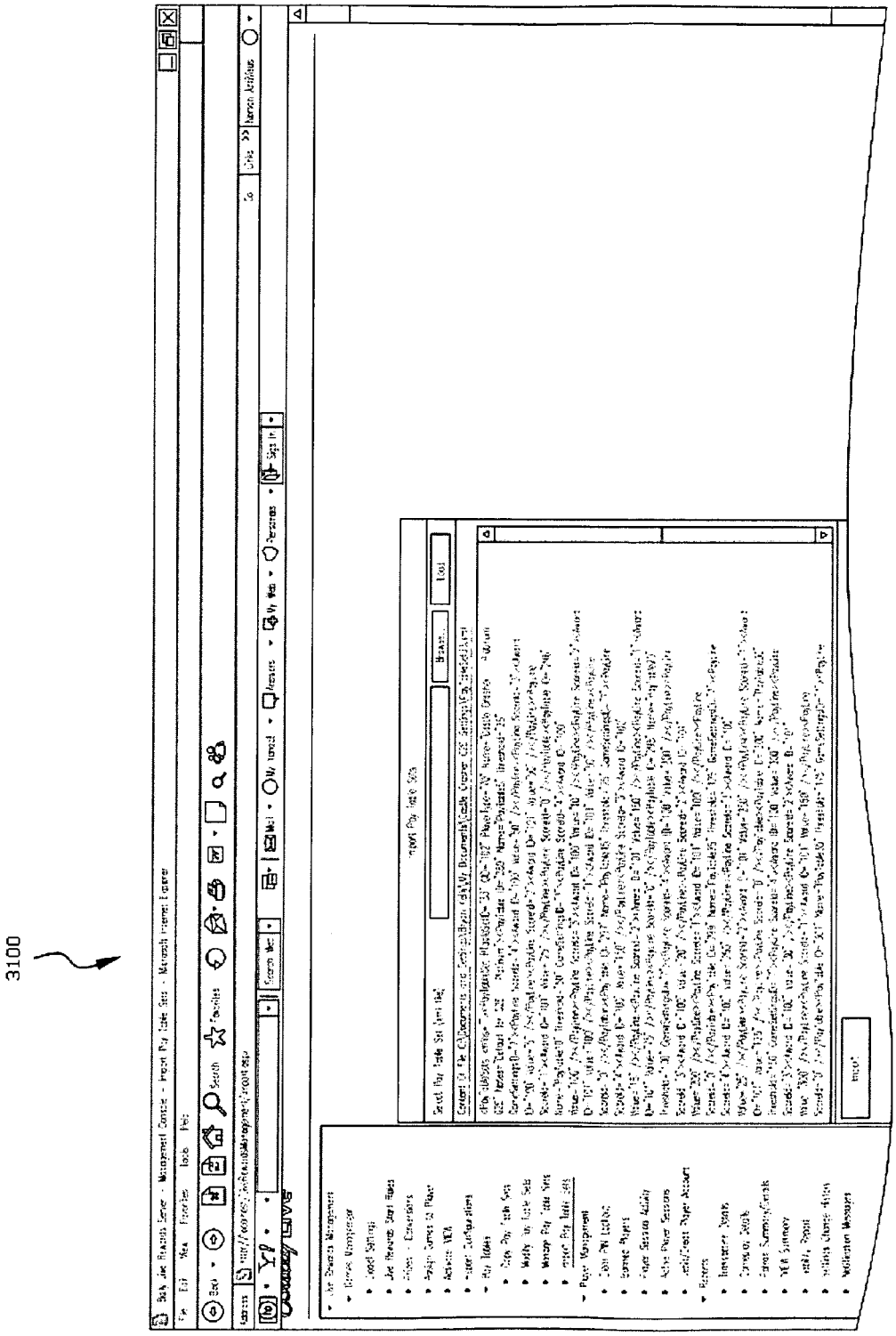


FIG. 31

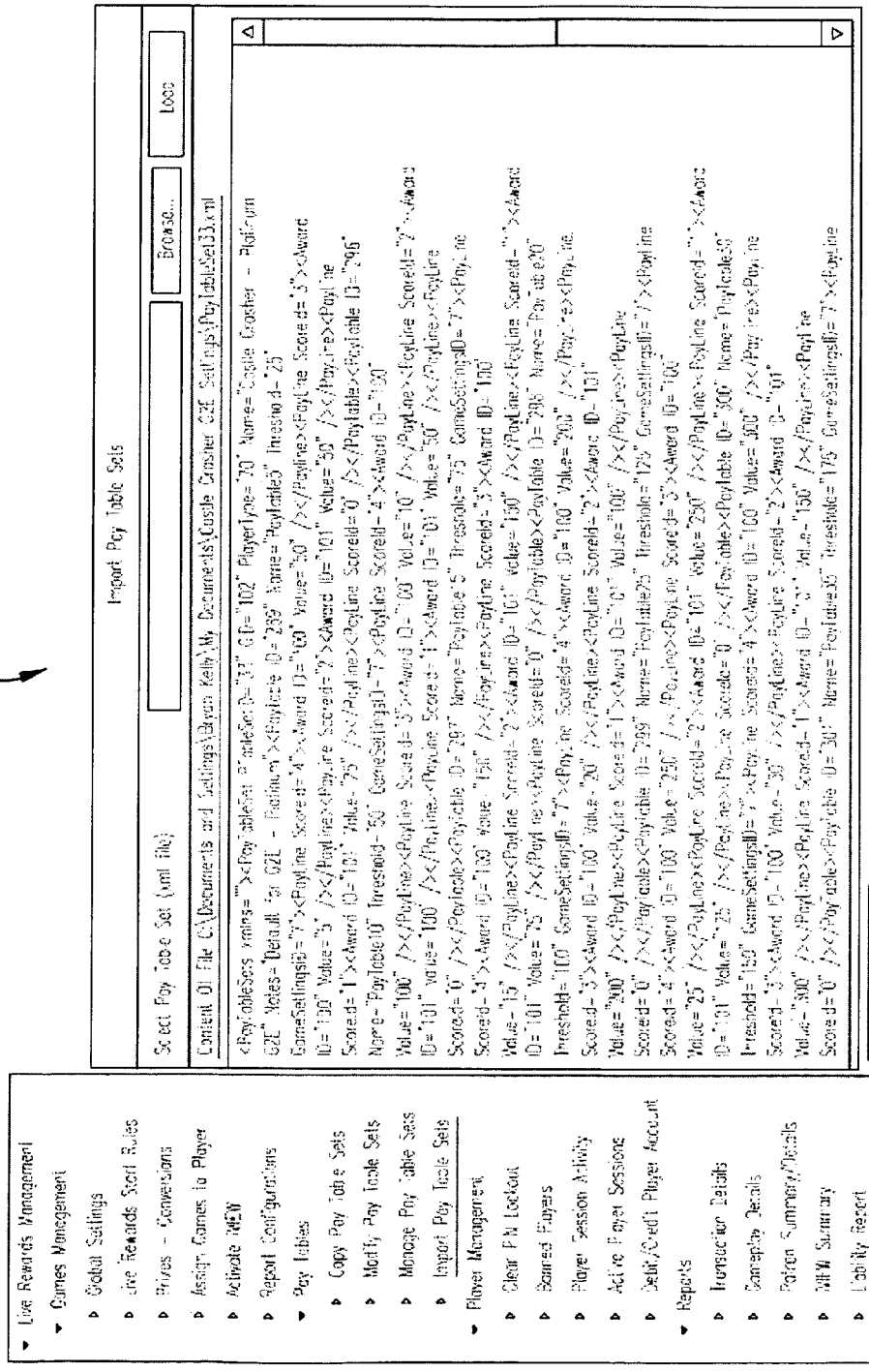

3102
Live Rewards Management
Games Management
Global Settings
Live Rewards Slot Rules
Prizes - Conversions
Assign Games to Player
Activate NEW
Export Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Gameplay Details
Patron Summary/Details
NEW Summary
Liability Report
Settings Change History
Notification Messages
Import Pay Table Sets
Select Pay Table Set (xml file)
Browse...
Load
Import

FIG.31A

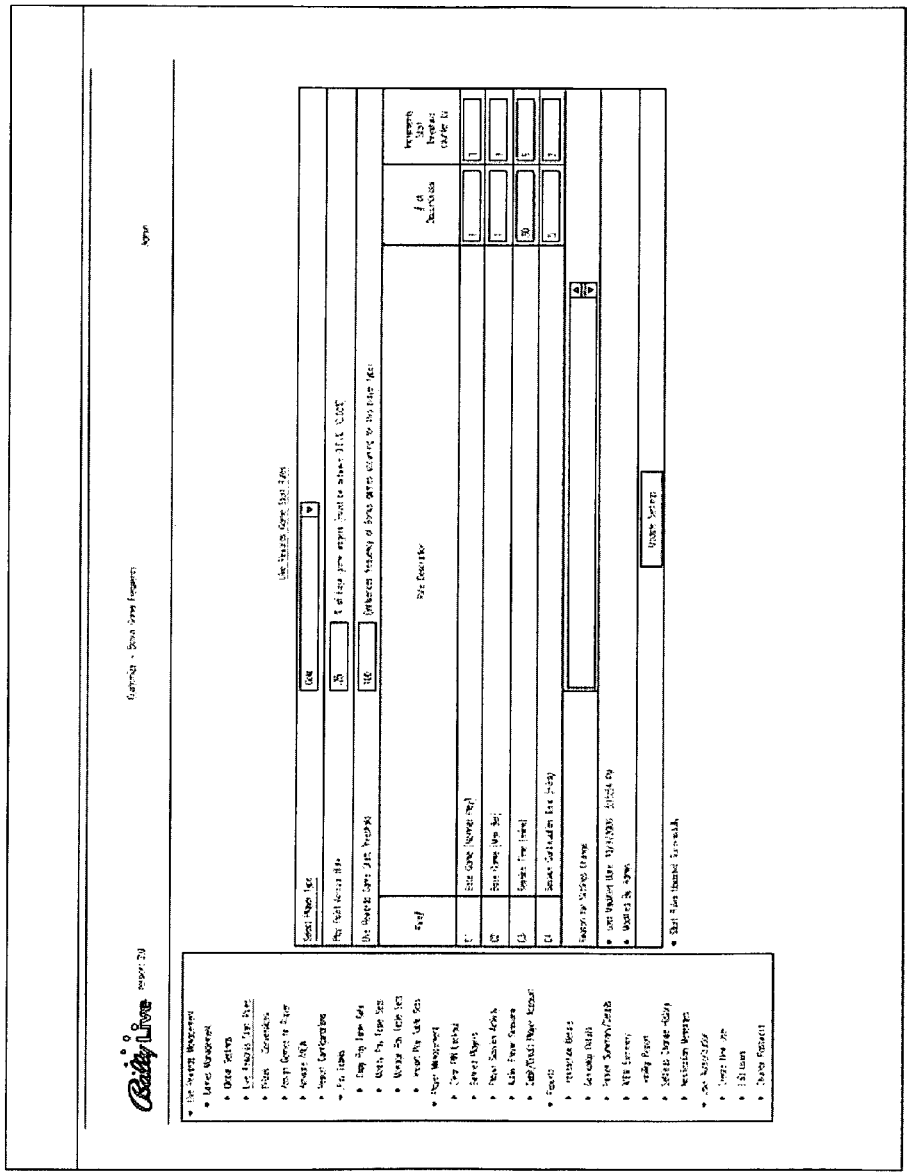


FIG.32

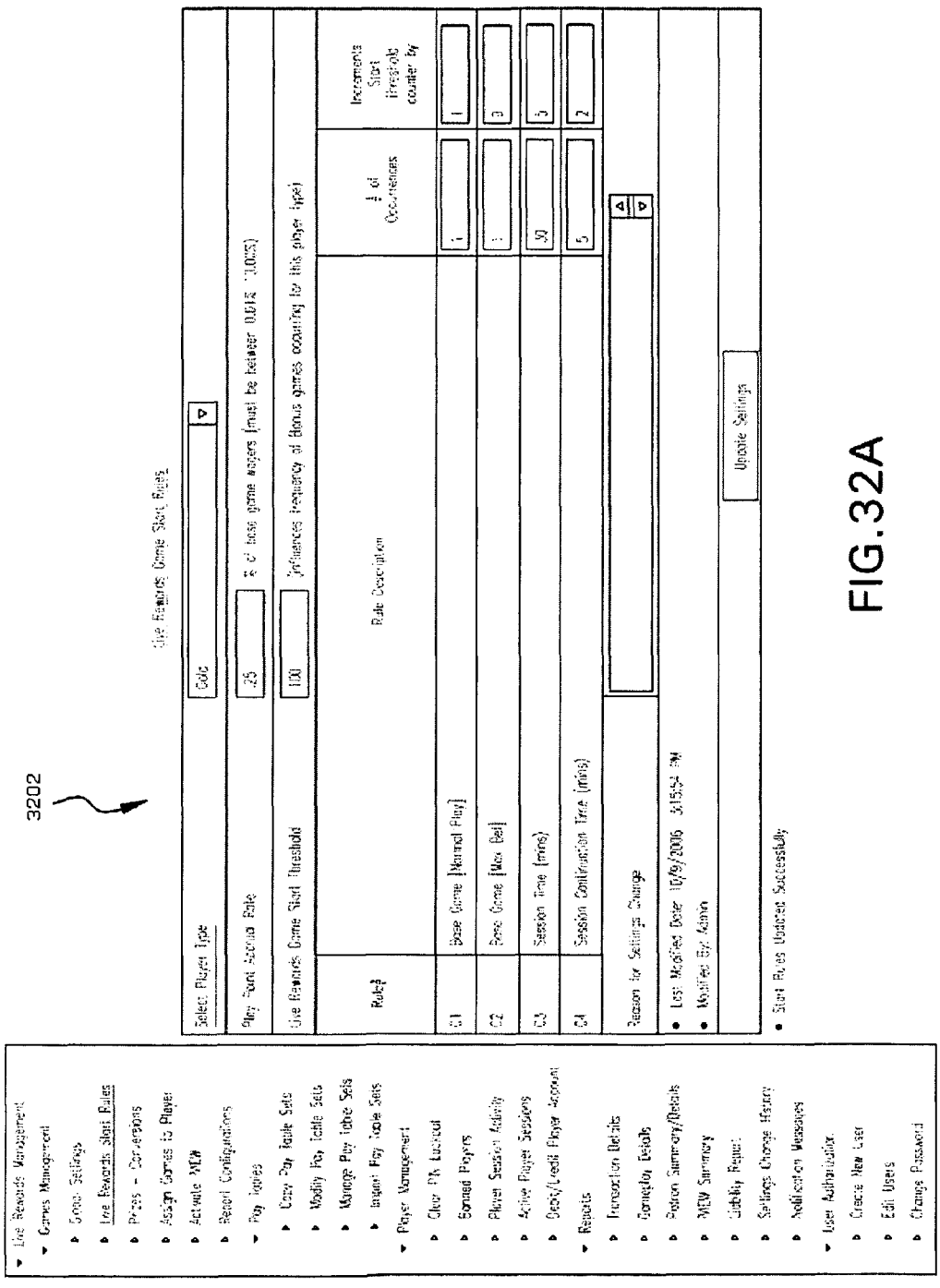

3202
Live Rewards Management
Games Management
Game Settings
Live Rewards Start Rules
Prizes - Conversions
Assign Games to Player
Activate MEW
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear Pin Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Connection Details
Patron Summary/Details
MEW Summary
Liability Report
Settings Change History
Notification Messages
User Authentication
Create New User
Edit Users
Change Password
Live Rewards Game Start Rules
Select Player Type
Color
Play Count Accrual Rate
25
# of base game wagers (must be between 0.01 & 100.00)
Live Rewards Game Start Threshold
100
Occurrences frequency of Bonus games occurring for this player type)
Rule#
Rule Description
# of Occurrences
Increments Start threshold counter by
01
Base Game (Normal Play)
1
1
02
Base Game (Max Bet)
1
3
03
Session Time (mins)
30
5
04
Session Confirmation Time (mins)
5
2
Reason for Settings Change
Last Modified Date: 10/9/2006 3:15:54 PM
Modified By: Admin
Update Settings
Start Rules Updated Successfully

FIG.32A

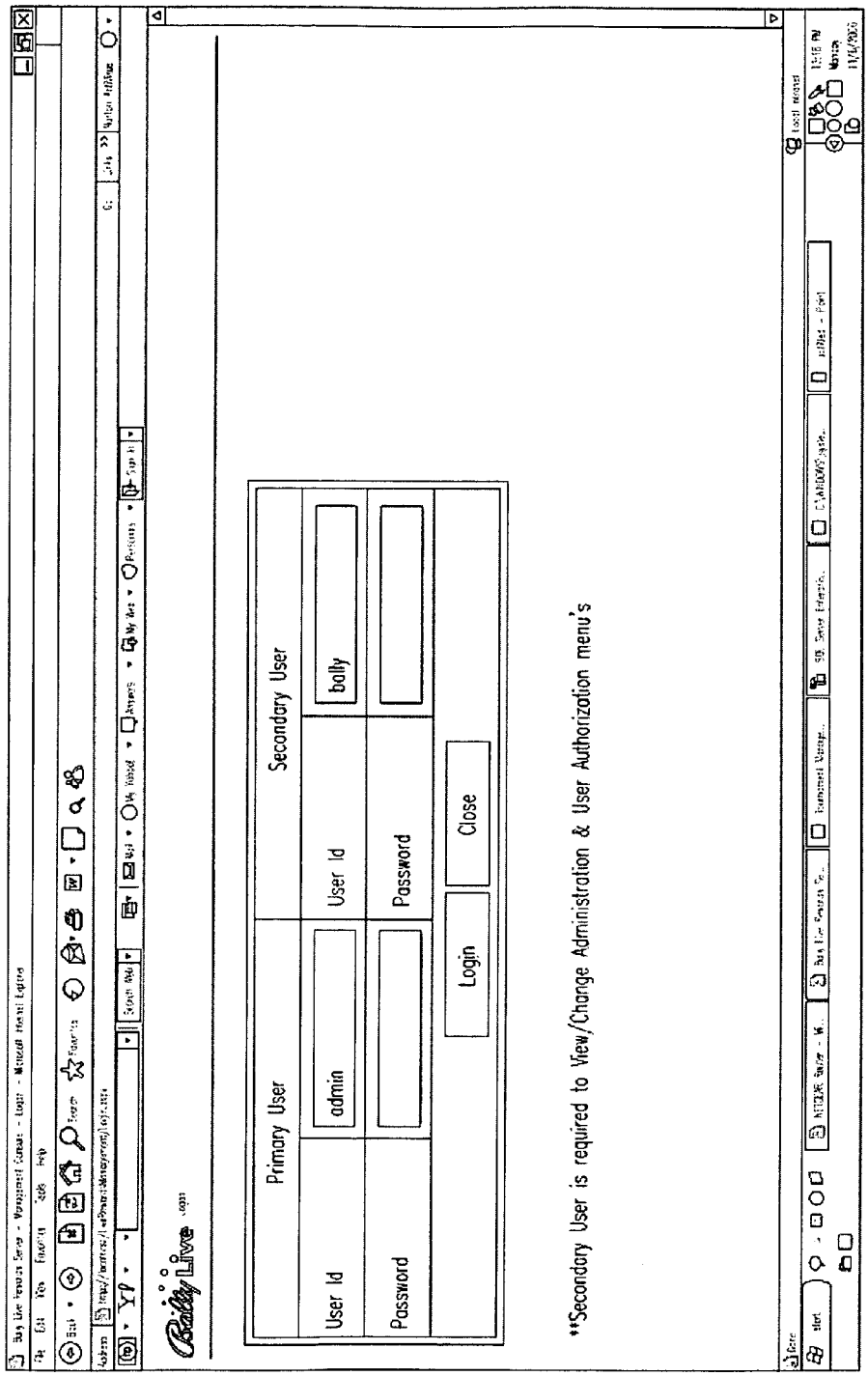

3300
Primary User
User Id
admin
Password
Secondary User
User Id
bally
Password
Login
Close
**Secondary User is required to View/Change Administration & User Authorization menu's

FIG.33

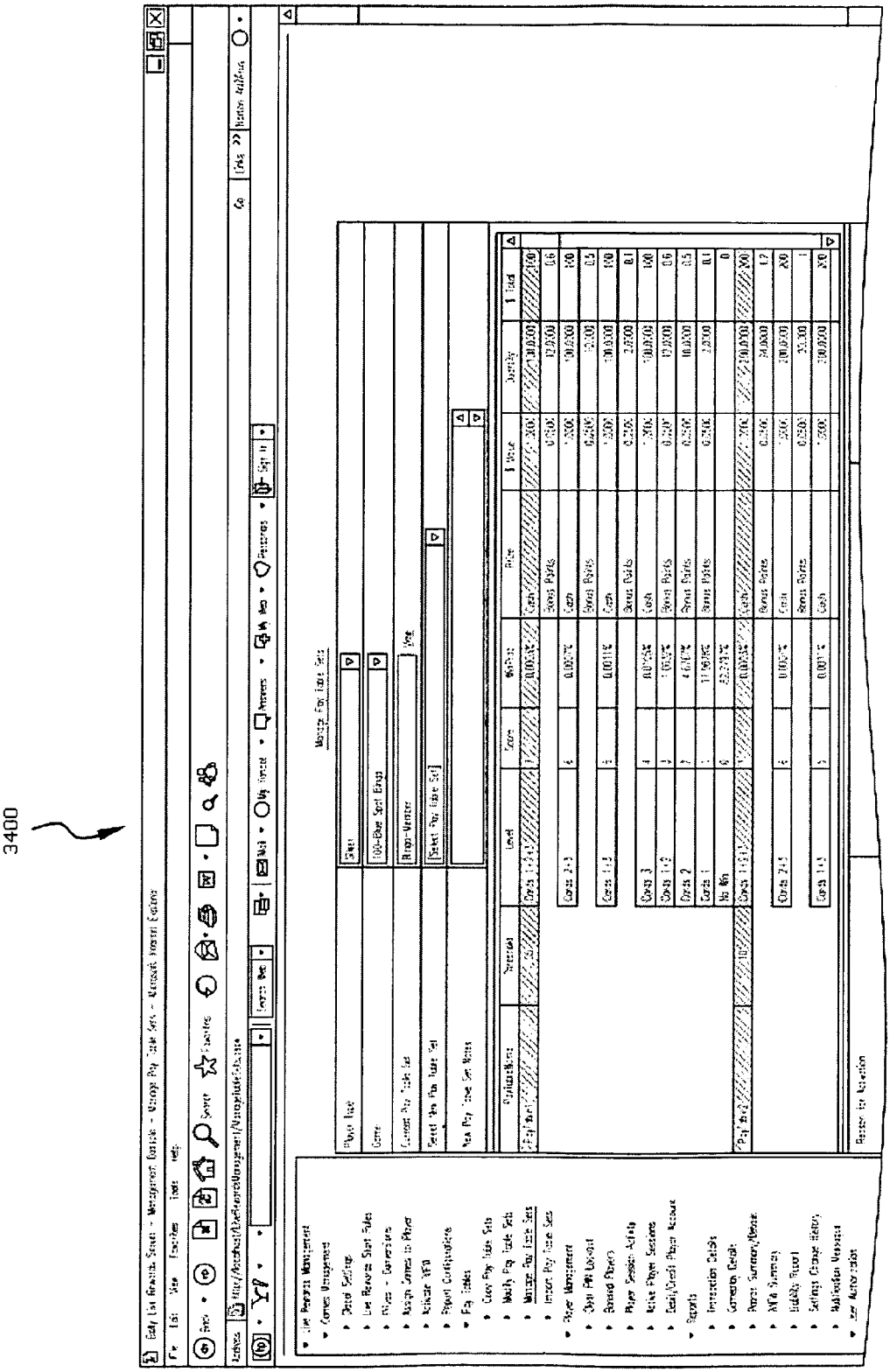


FIG. 34

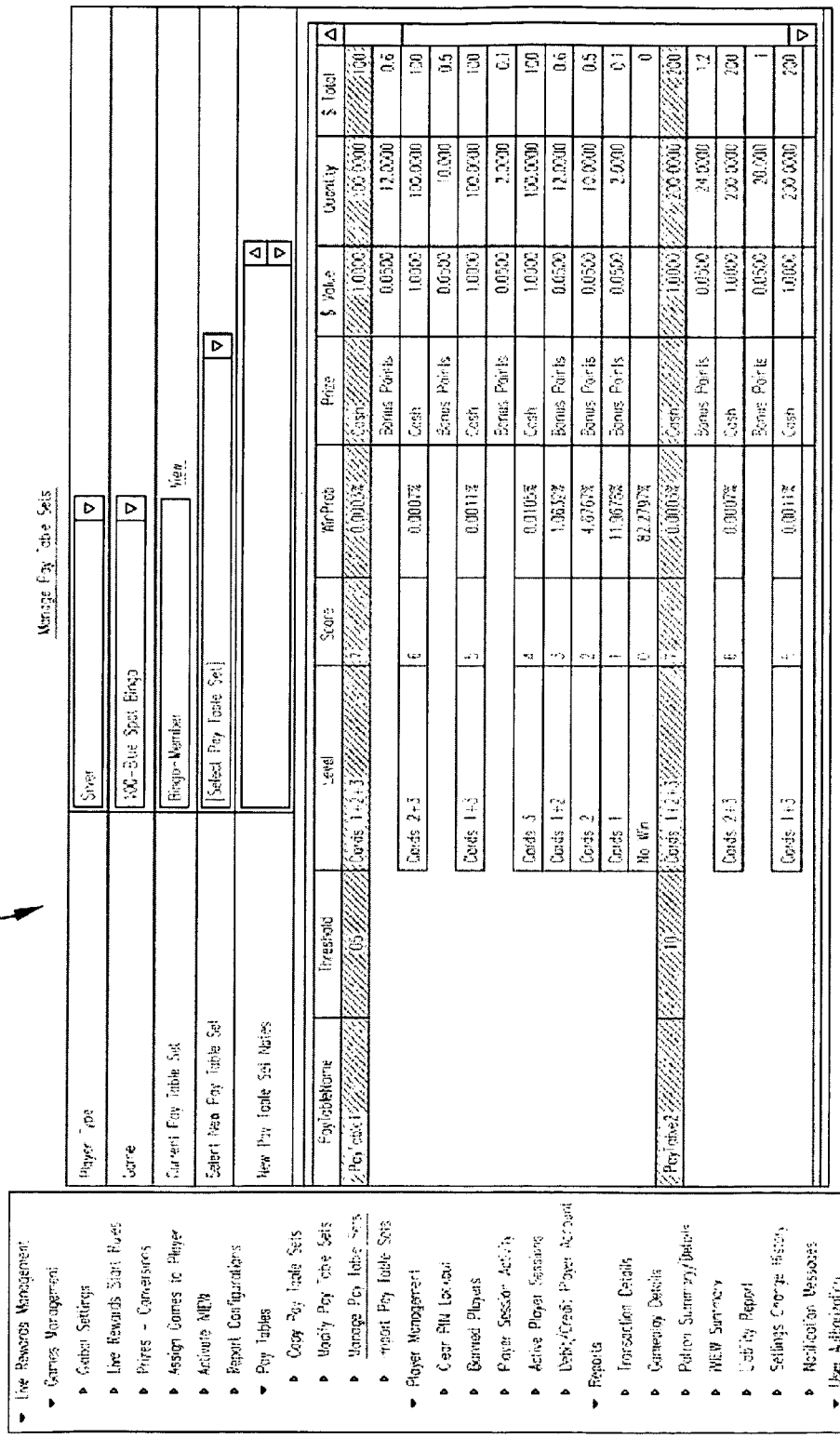

3402
Manage Pay Table Sets
Player Type
Silver
Game
100-Blue Spot Bingo
Current Pay Table Set
Bingo-Member
View
Select New Pay Table Set
Select Pay Table Set
New Pay Table Set Notes
PayTableName
Threshold
Level
Score
WinProb
Prize
$ Value
Quantity
$ Total
Live Rewards Management
Games Management
Global Settings
Live Rewards Start Rules
Prizes - Conversions
Assign Games to Player
Activate MPB
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear RM Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Gameplay Details
Patron Summary/Details
NEW Summary
Liability Report
Settings Change History
Notification Messages
User Administration
Reason for Activation

FIG.34A

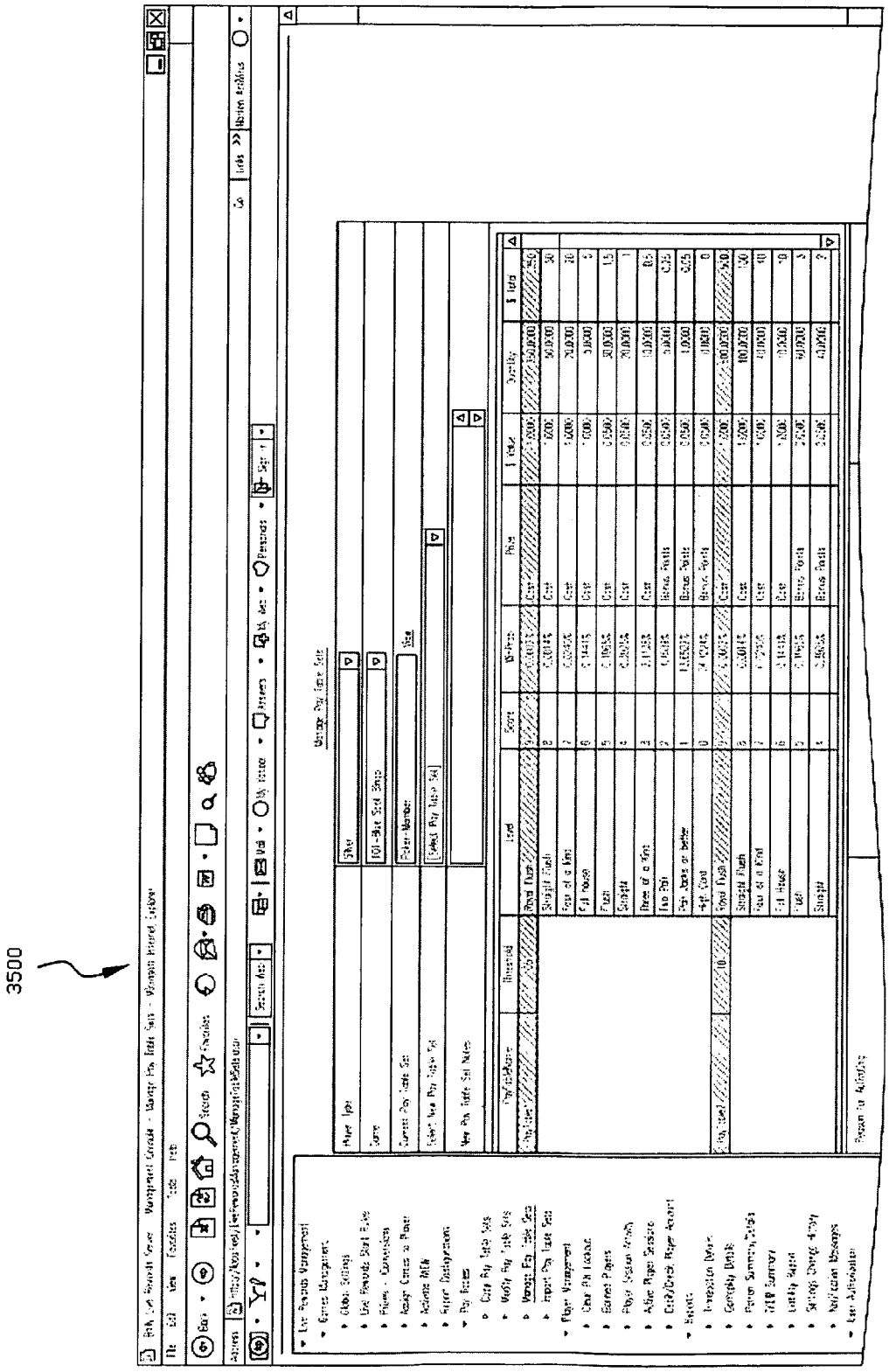


FIG. 35

3502

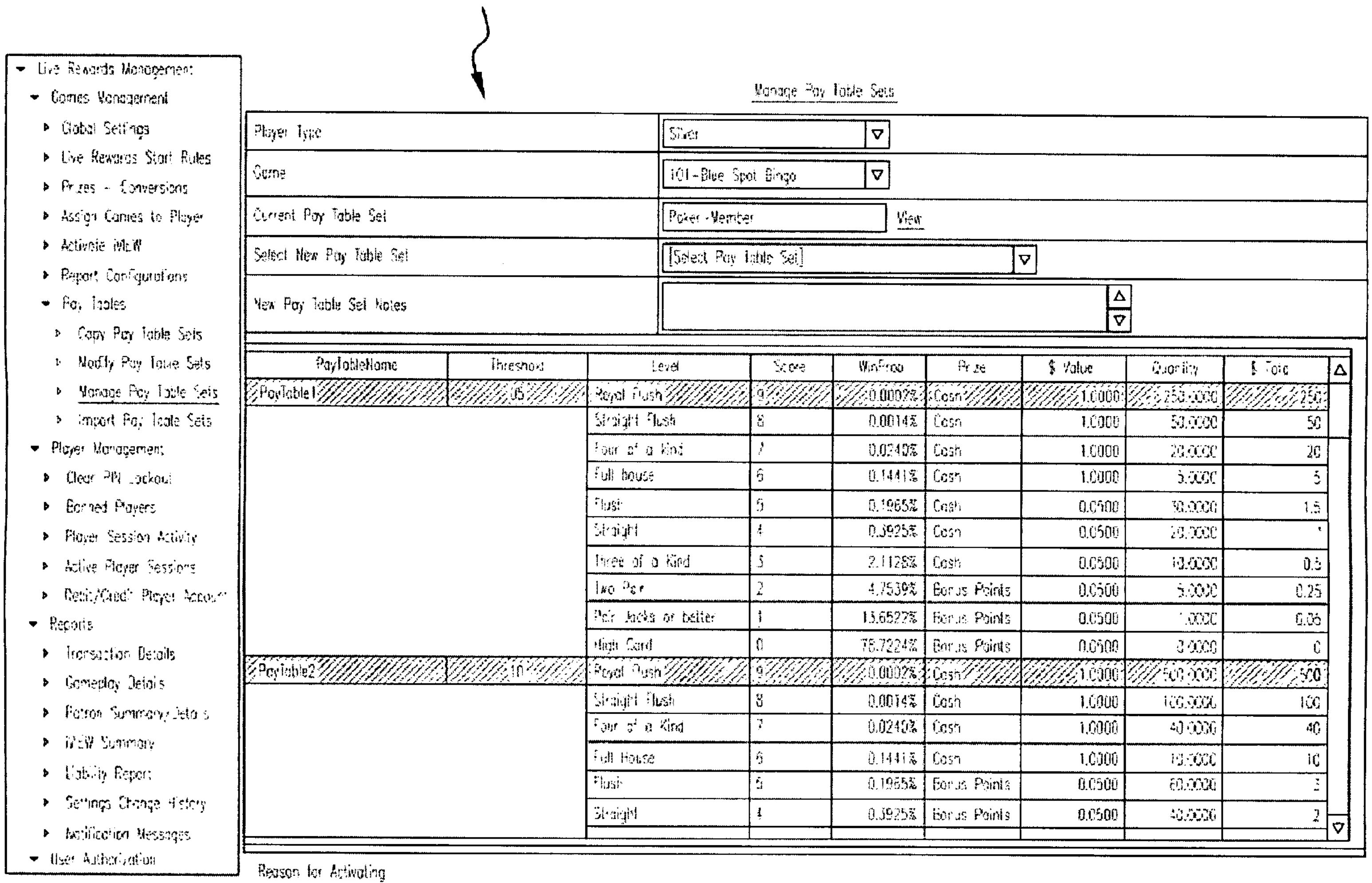

Live Rewards Management
Games Management
Global Settings
Live Rewards Start Rules
Prizes - Conversions
Assign Games to Player
Activate MeW
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Gameplay Details
Patron Summary/Details
MeW Summary
Liability Report
Settings Change History
Notification Messages
User Authorization
Manage Pay Table Sets
Player Type
Silver
Game
101-Blue Spot Bingo
Current Pay Table Set
Poker-Member
View
Select New Pay Table Set
[Select Pay Table Set]
New Pay Table Set Notes
PayTableName | Threshold | Level | Score | WinProb | Prize | $ Value | Quantity | $ Total
PayTable1 | .05 | Royal Flush | 9 | 0.0002% | Cash | 1.0000 | 250.0000 | 250
Straight Flush | 8 | 0.0014% | Cash | 1.0000 | 50.0000 | 50
Four of a Kind | 7 | 0.0240% | Cash | 1.0000 | 20.0000 | 20
Full house | 6 | 0.1441% | Cash | 1.0000 | 5.0000 | 5
Flush | 5 | 0.1965% | Cash | 0.0500 | 30.0000 | 1.5
Straight | 4 | 0.3925% | Cash | 0.0500 | 20.0000 | 1
Three of a Kind | 3 | 2.1128% | Cash | 0.0500 | 10.0000 | 0.5
Two Pair | 2 | 4.7539% | Bonus Points | 0.0500 | 5.0000 | 0.25
Pair Jacks or better | 1 | 15.6527% | Bonus Points | 0.0500 | 1.0000 | 0.05
High Card | 0 | 76.7224% | Bonus Points | 0.0500 | 0.0000 | 0
PayTable2 | .10 | Royal Flush | 9 | 0.0002% | Cash | 1.0000 | 500.0000 | 500
Straight Flush | 8 | 0.0014% | Cash | 1.0000 | 100.0000 | 100
Four of a Kind | 7 | 0.0240% | Cash | 1.0000 | 40.0000 | 40
Full House | 6 | 0.1441% | Cash | 1.0000 | 10.0000 | 10
Flush | 5 | 0.1965% | Bonus Points | 0.0500 | 60.0000 | 3
Straight | 4 | 0.3925% | Bonus Points | 0.0500 | 40.0000 | 2
Reason for Activating

FIG.35A

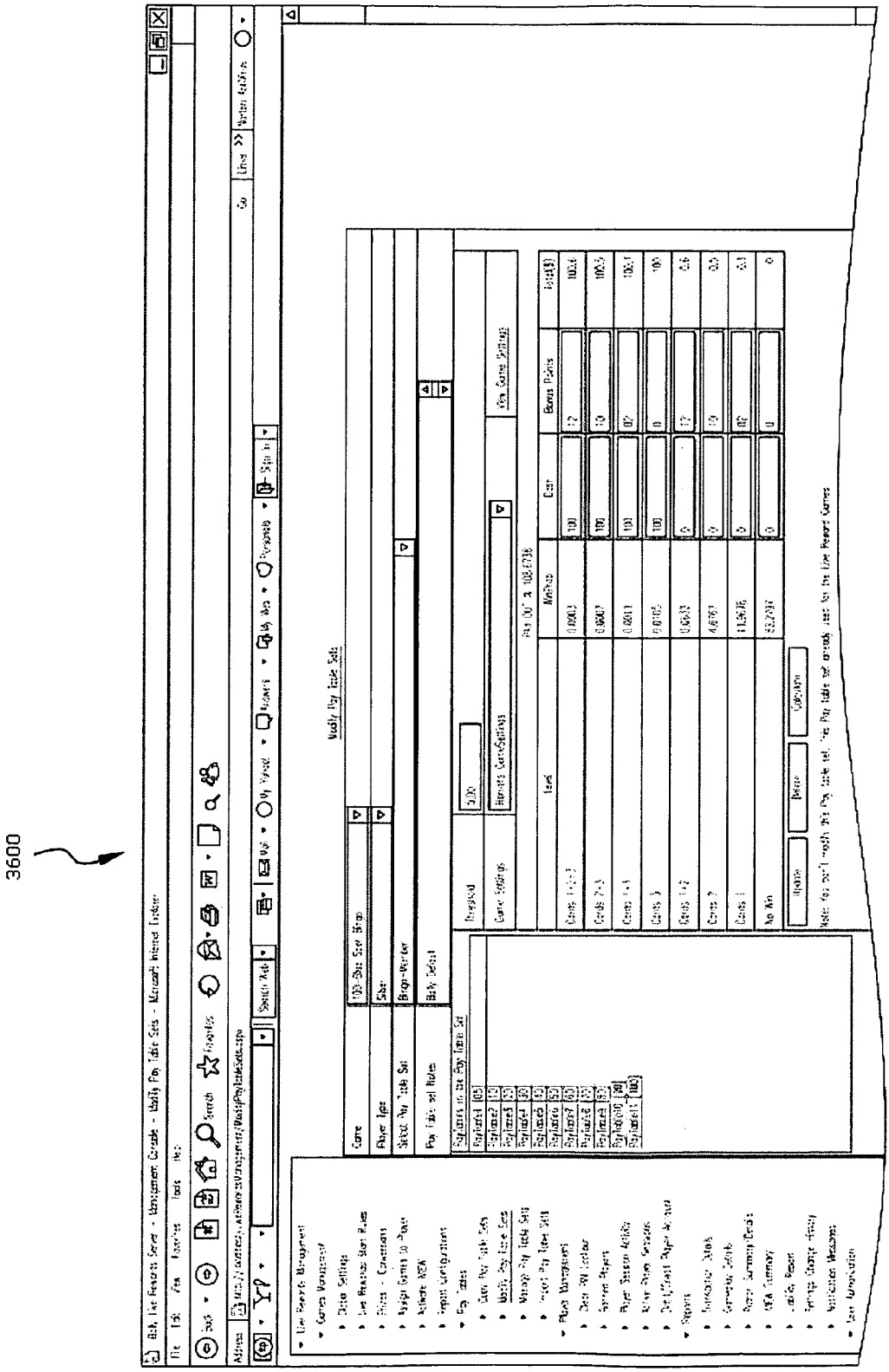


FIG.36

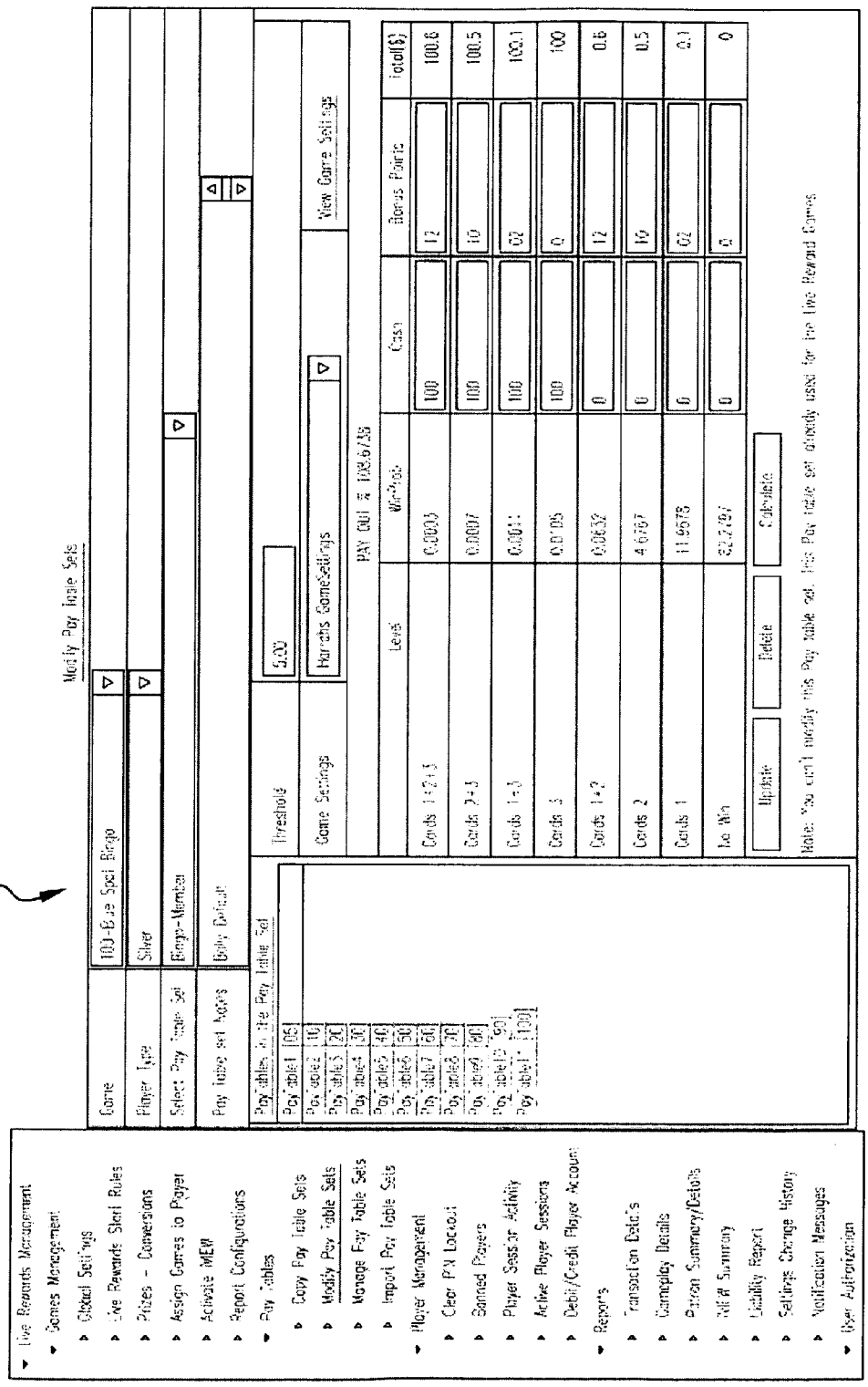

3602
Modify Pay Table Sets
Live Rewards Management
Games Management
Global Settings
Live Rewards Short Rules
Prizes - Conversions
Assign Games to Player
Activate MEM
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PW Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Gameplay Details
Patron Summary/Details
Bill In Summary
Liability Report
Settings Change History
Notification Messages
User Authorization
Game
100-Ball Spot Bingo
Player Type
Silver
Select Pay Table Set
Bingo-Member
Pay table set Name
Daily Default
Pay tables in the Pay Table Set
Pay table1 [95]
Pay table2 [10]
Pay table3 [20]
Pay table4 [30]
Pay table5 [40]
Pay table6 [50]
Pay table7 [60]
Pay table8 [70]
Pay table9 [80]
Pay table10 [90]
Pay table11 [100]
Threshold
5.00
Game Settings
Rewards GameSettings
View Game Settings
PAY OUT & WIN ODDS
Levels
Win Odds
Cash
Bonus Points
Total($)
Cards 1+2+3
0.0003
100
12
100.8
Cards 2+3
0.0007
100
10
100.5
Cards 1+3
0.0011
100
02
100.1
Cards 3
0.0105
100
0
100
Cards 1+2
0.0032
0
12
0.6
Cards 2
4.6767
0
10
0.5
Cards 1
11.9578
0
02
0.1
No Win
82.2497
0
0
0
Update
Delete
Cancel/delete
Note: You can't modify this Pay table set. This Pay table set already used for the Live Reward Games

FIG. 36A

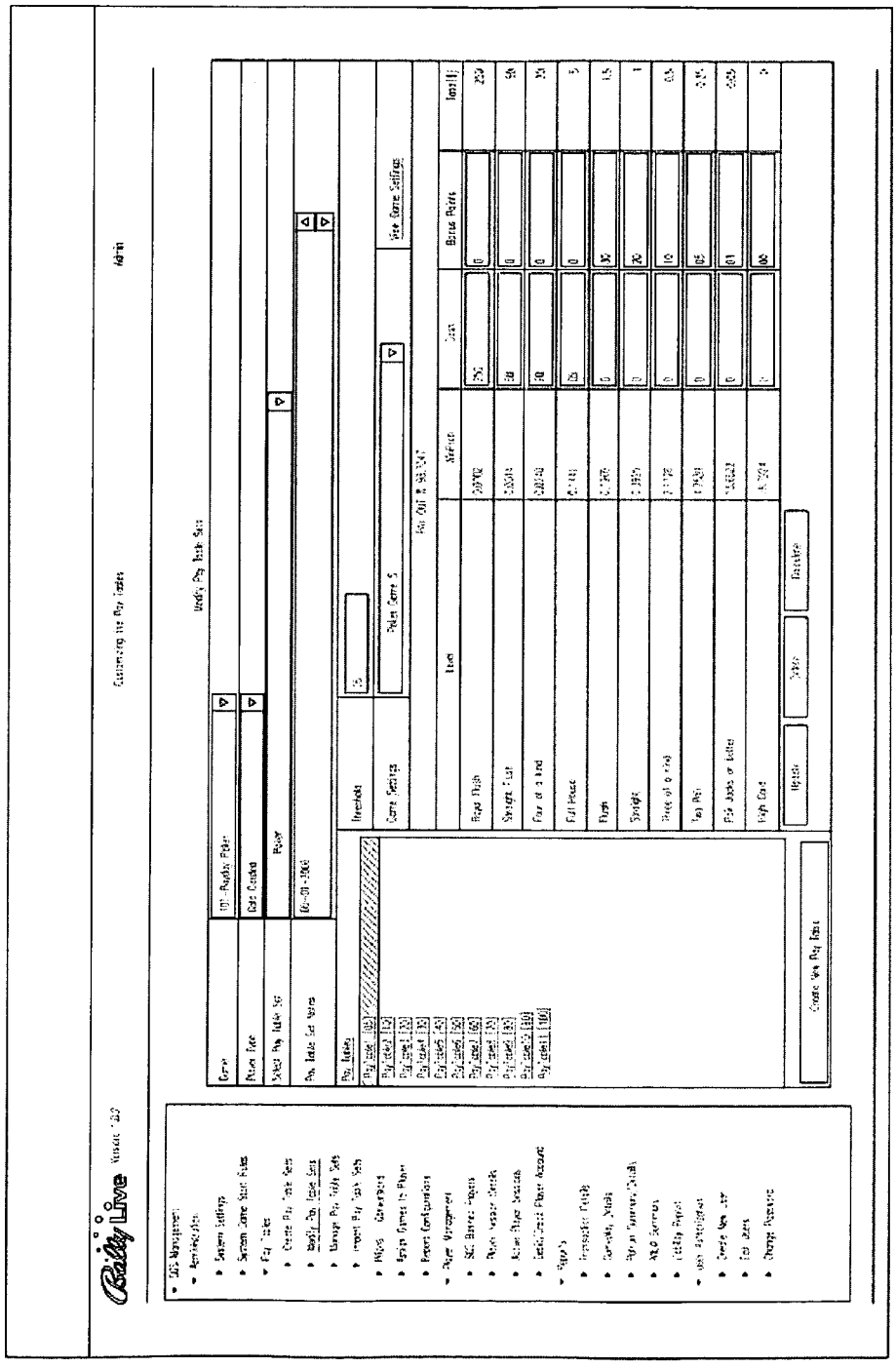


FIG.37

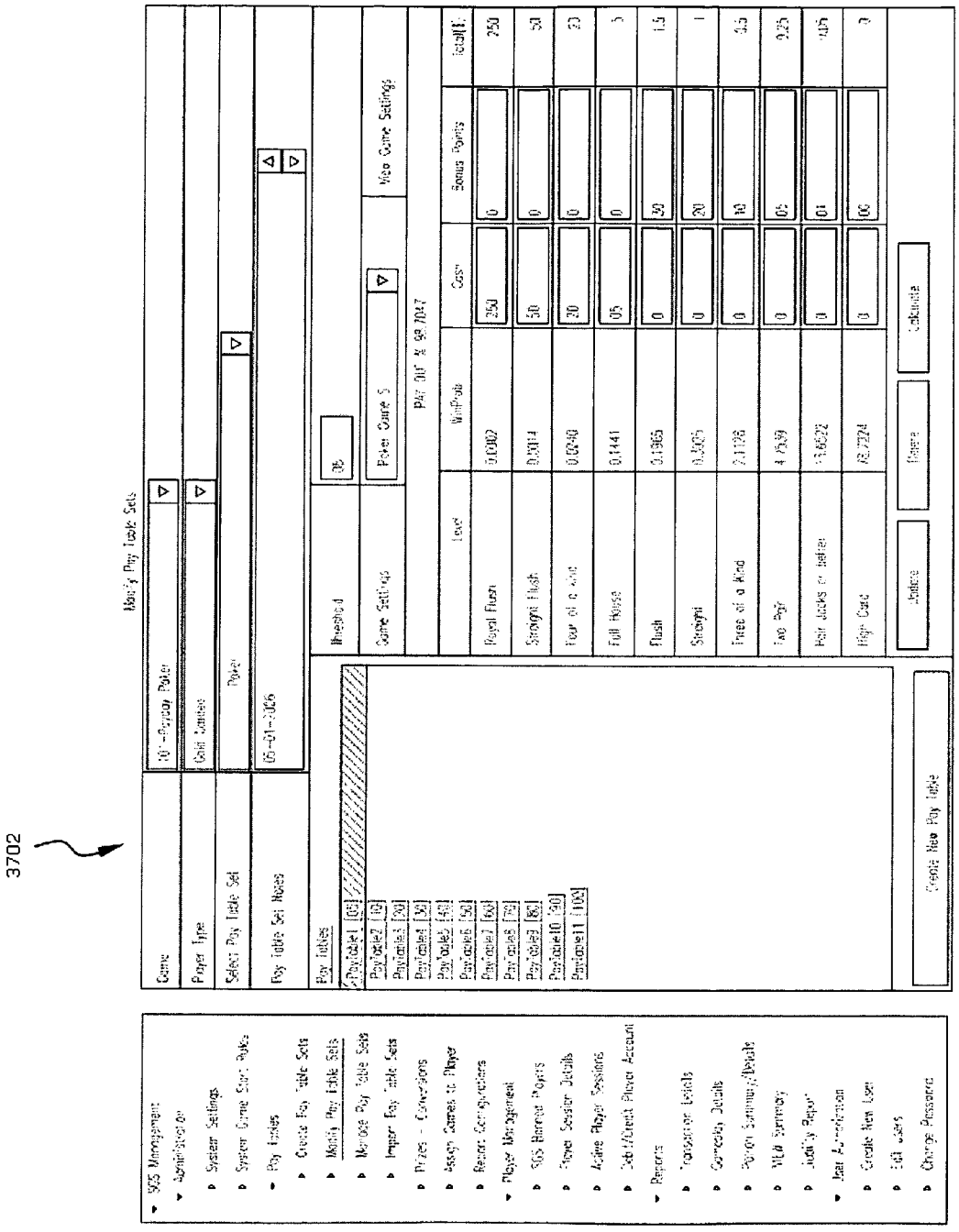

3702
Modify Pay Table Sets
Game
10 - Penny Poker
Player Type
John Cashier
Select Pay Table Set
Poker
Pay Table Set Name
05-01-2006
Pay Tables
Threshold
35
Game Settings
Poker Game 5
View Game Settings
Pay Out % 99.7047
Level
Win%
Cash
Bonus Points
Total
Royal Flush
0.0002
250
0
250
Straight Flush
0.0014
50
0
50
Four of a Kind
0.0240
20
0
20
Full House
0.1441
05
0
5
Flush
0.1965
0
20
1.5
Straight
0.3925
0
20
1
Three of a Kind
2.1128
0
10
4.5
Two Pair
4.7539
0
05
0.25
Hair Jacks or Better
13.8522
0
01
0.05
High Card
42.2724
0
00
0
Update
Revert
Calculate
Create New Pay Table
3905 Management
Administration
System Settings
System Game Sort Rules
Pay Tables
Create Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Prizes - Conversions
Assign Games to Player
Recon Corrections
Player Management
3905 Barred Players
Player Session Details
Active Player Sessions
Set/Unset Player Account
Reports
Transaction Details
Correction Details
Player Summary Details
Win Summary
Jackpot Report
Jam Authentication
Create New User
Edit Users
Change Password

FIG.37A

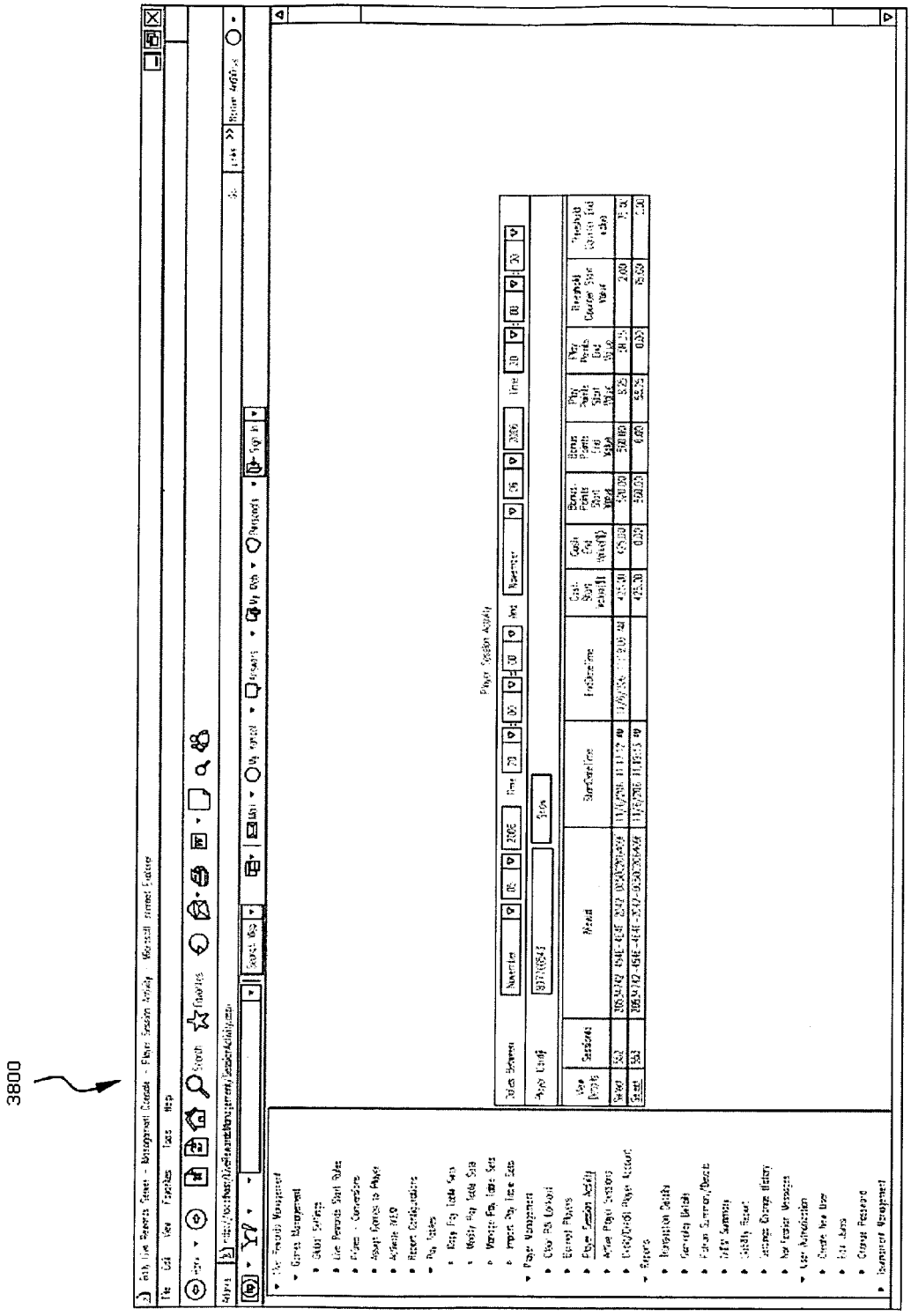


FIG.38

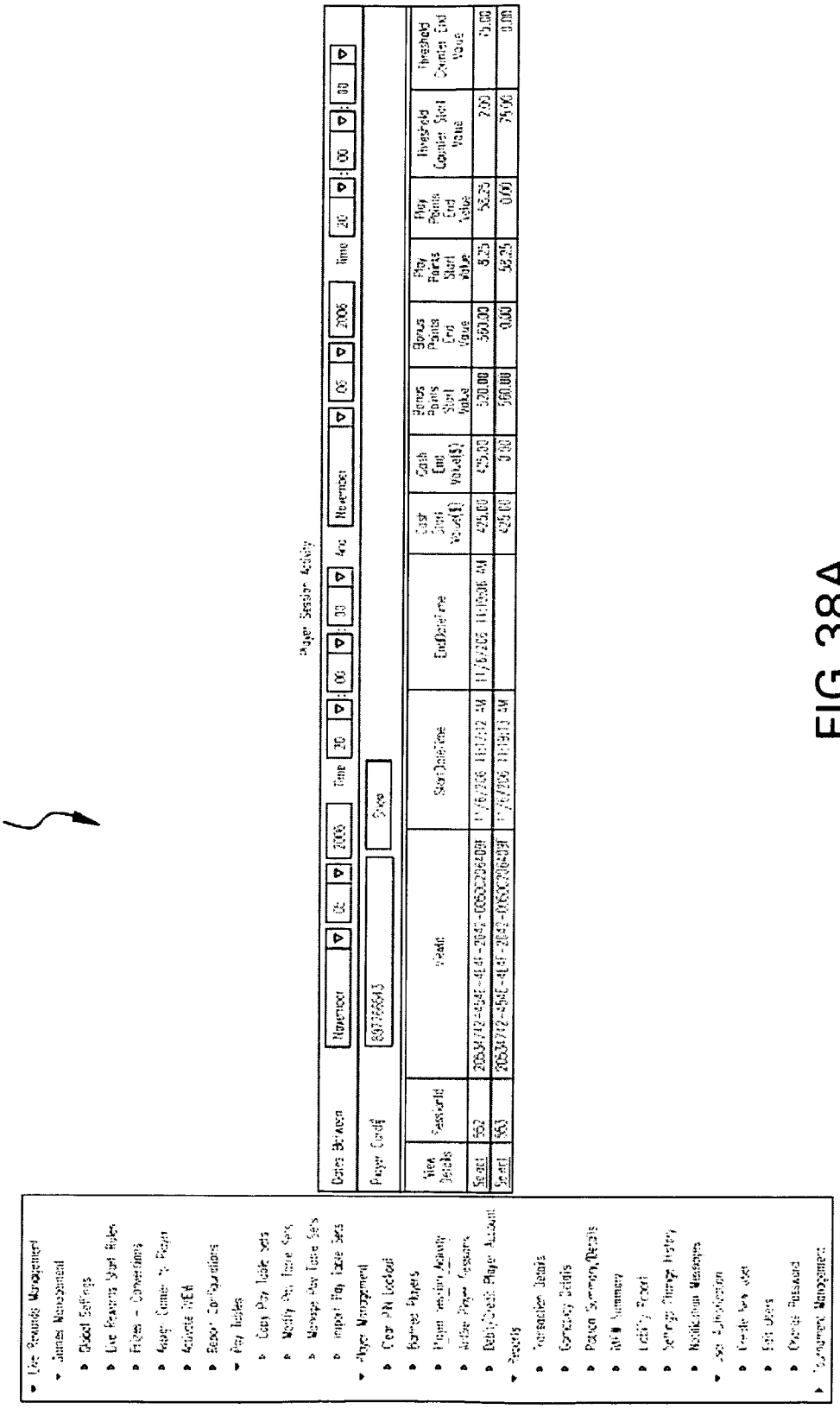

3802
Player Session Activity
Dates Between
November
2006
Time
Player Config
Show
View Details
SessionId
Width
StartDateTime
EndDateTime
Cash Start Value($)
Cash End Value($)
Bonus Points Start Value
Bonus Points End Value
Play Points Start Value
Play Points End Value
Threshold Counter Start Value
Threshold Counter End Value
Search
552
553
320.00
560.00
8.25
0.00
7.00
75.00
0.00

FIG.38A

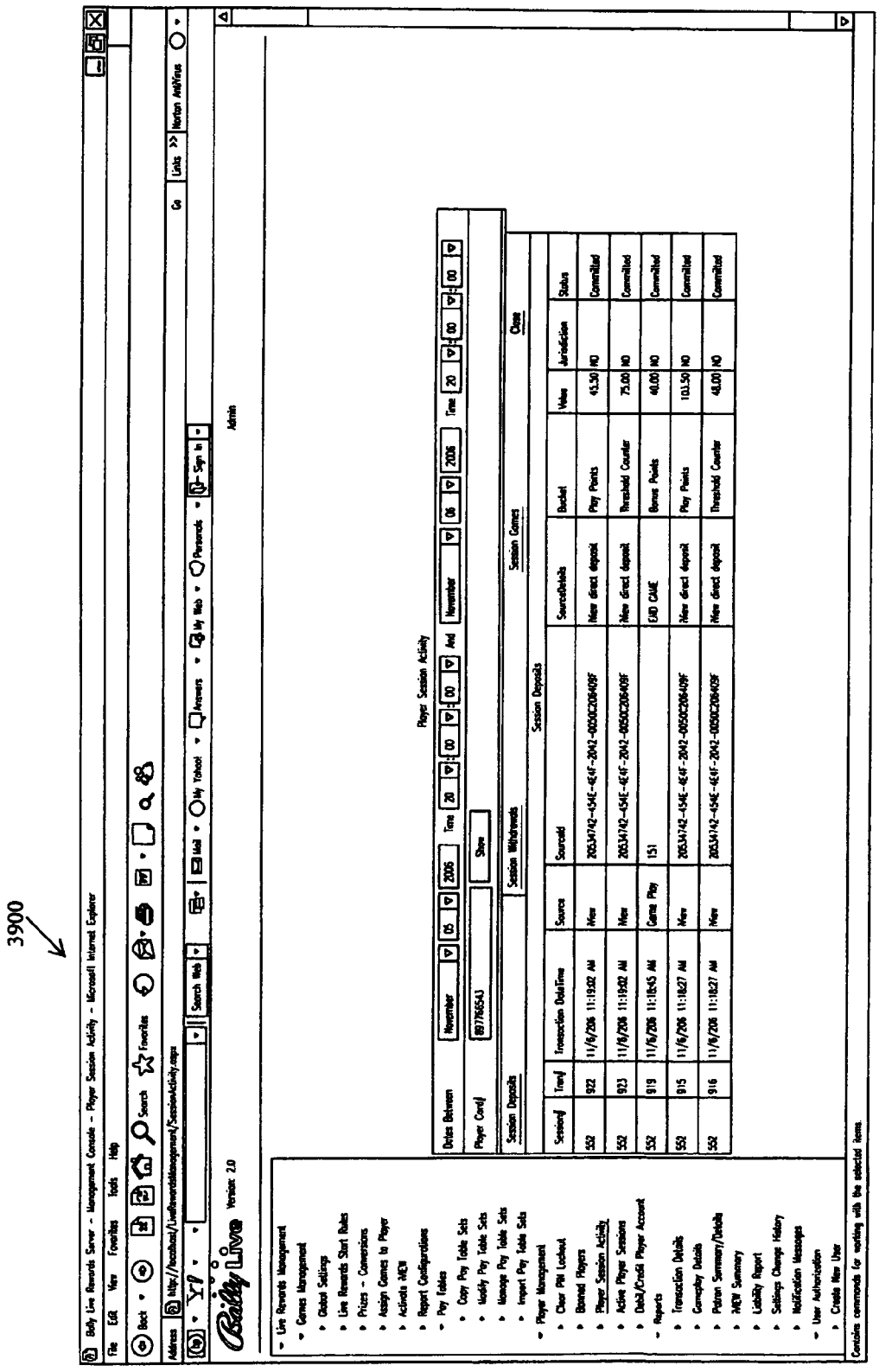

3900
Player Session Activity
Session Deposits
Session Withdrawals
Session Games
Close

FIG.39

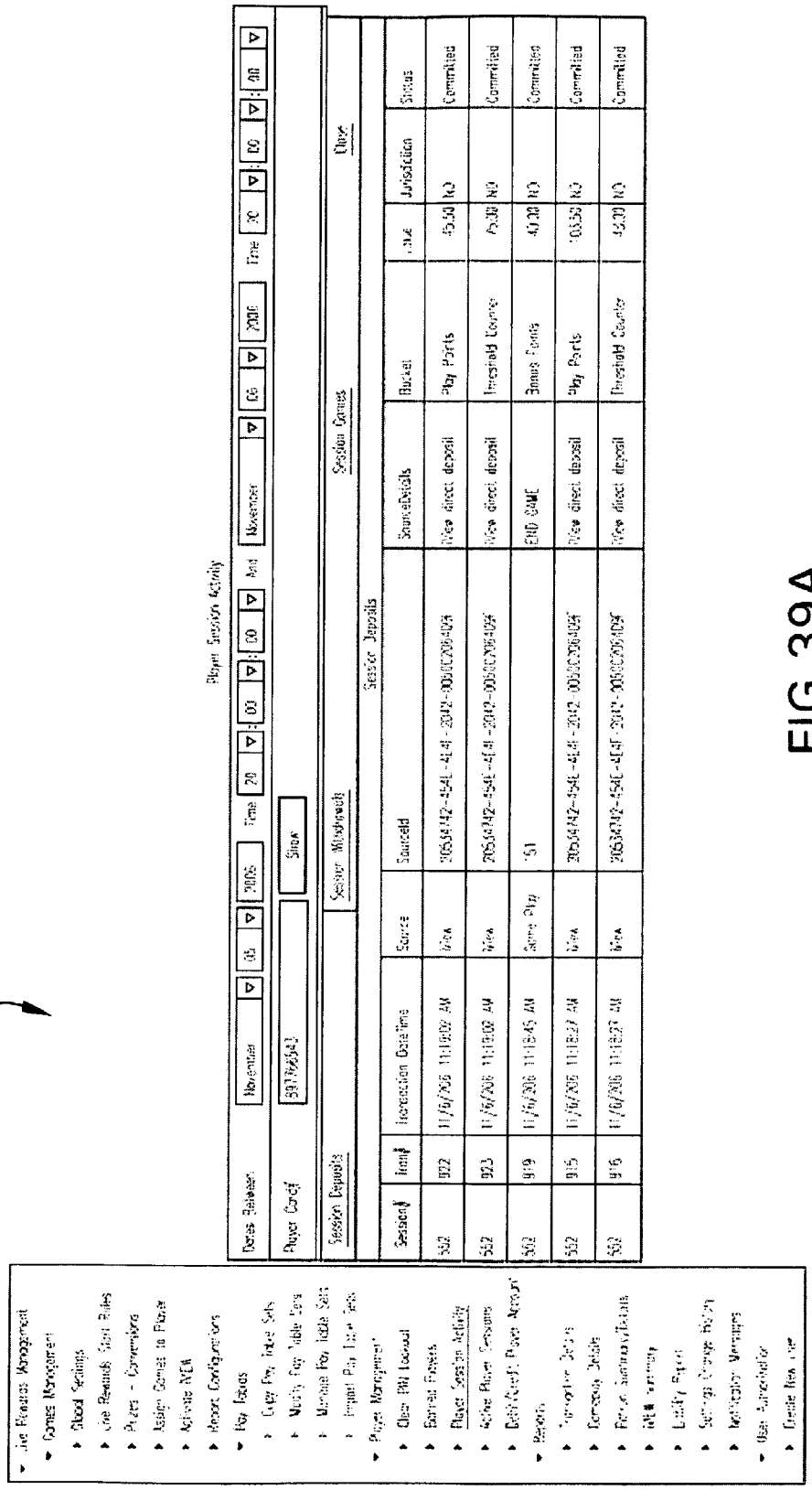

3902
Player Session Activity
Session Deposits
Session Jackpots
Done

FIG.39A

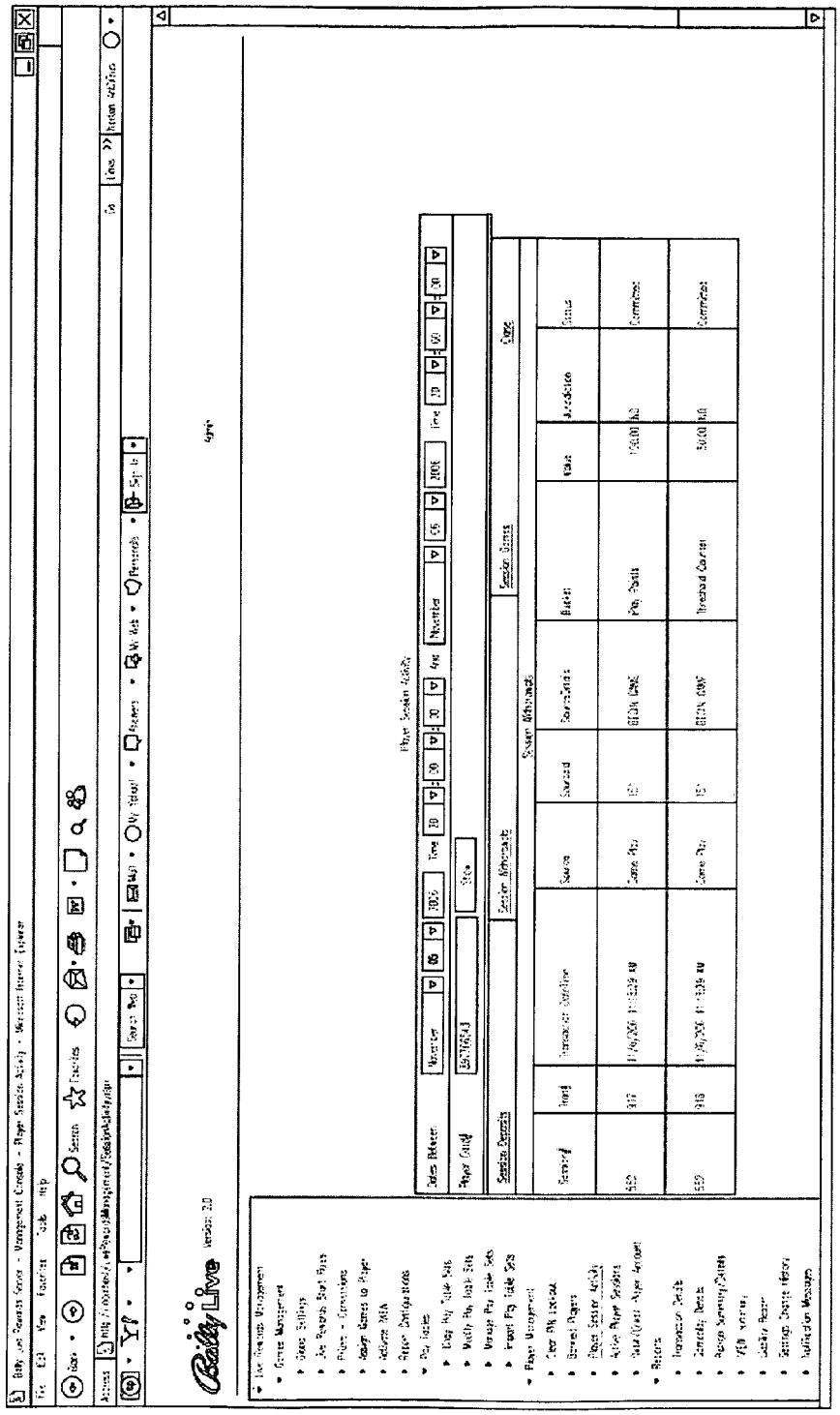


FIG. 40

4003

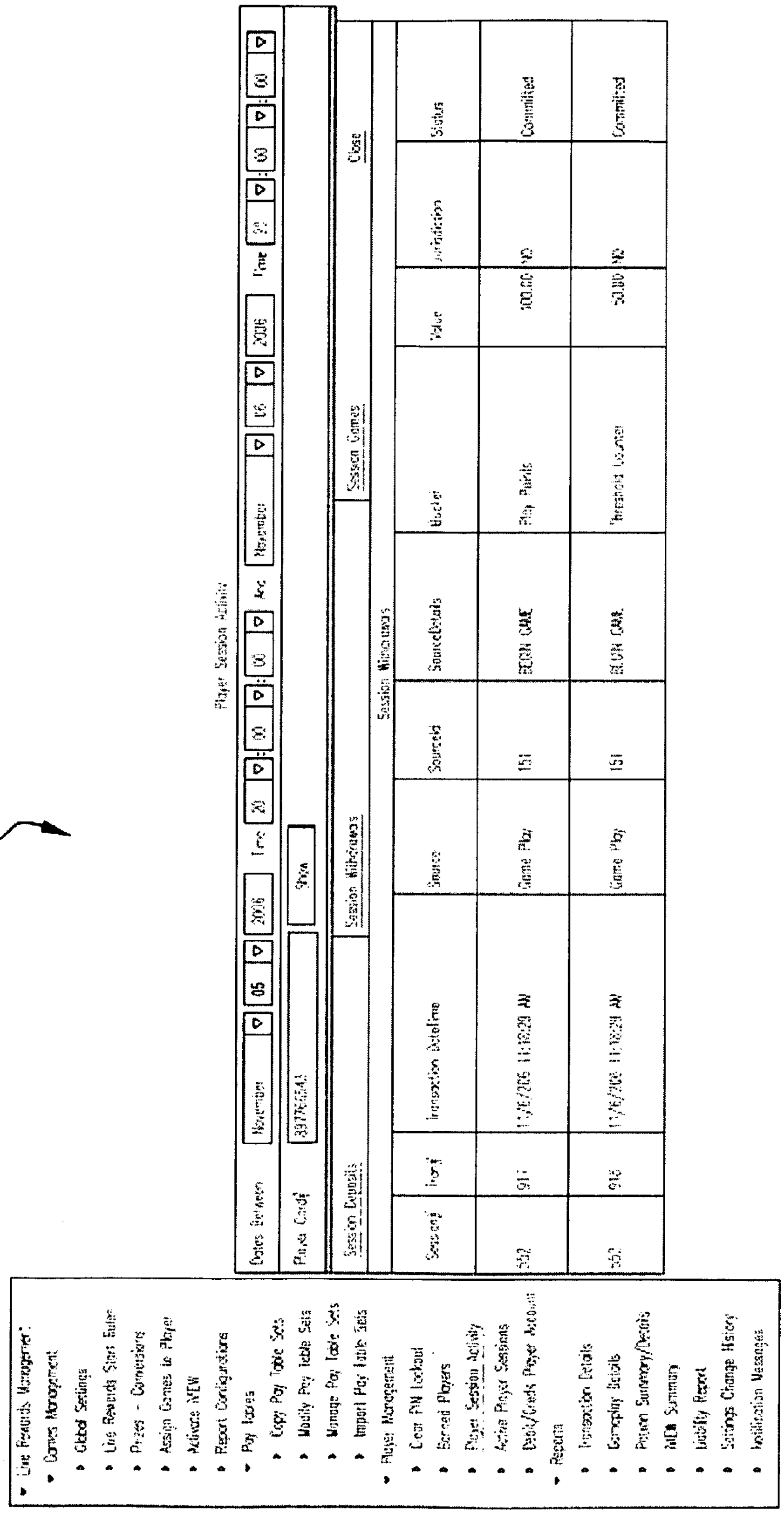

Player Session Activity
Dates Between
November
2006
Time
Player Card#
Show
Session Details
Session Withdrawals
Session Games
Close
Session#
Transaction DateTime
Source
SourceId
SourceDetails
Bucket
Value
Jurisdiction
Status
Game Play
151
BEGIN GAME
Play Points
Threshold Counter
100.00
50.00
Committed
Live Rewards Management
Games Management
Global Settings
Live Rewards Start Rules
Prizes - Conversions
Assign Games to Player
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Gameplay Details
Patron Summary/Details
Liability Report
Settings Change History
Validation Messages

FIG.40A

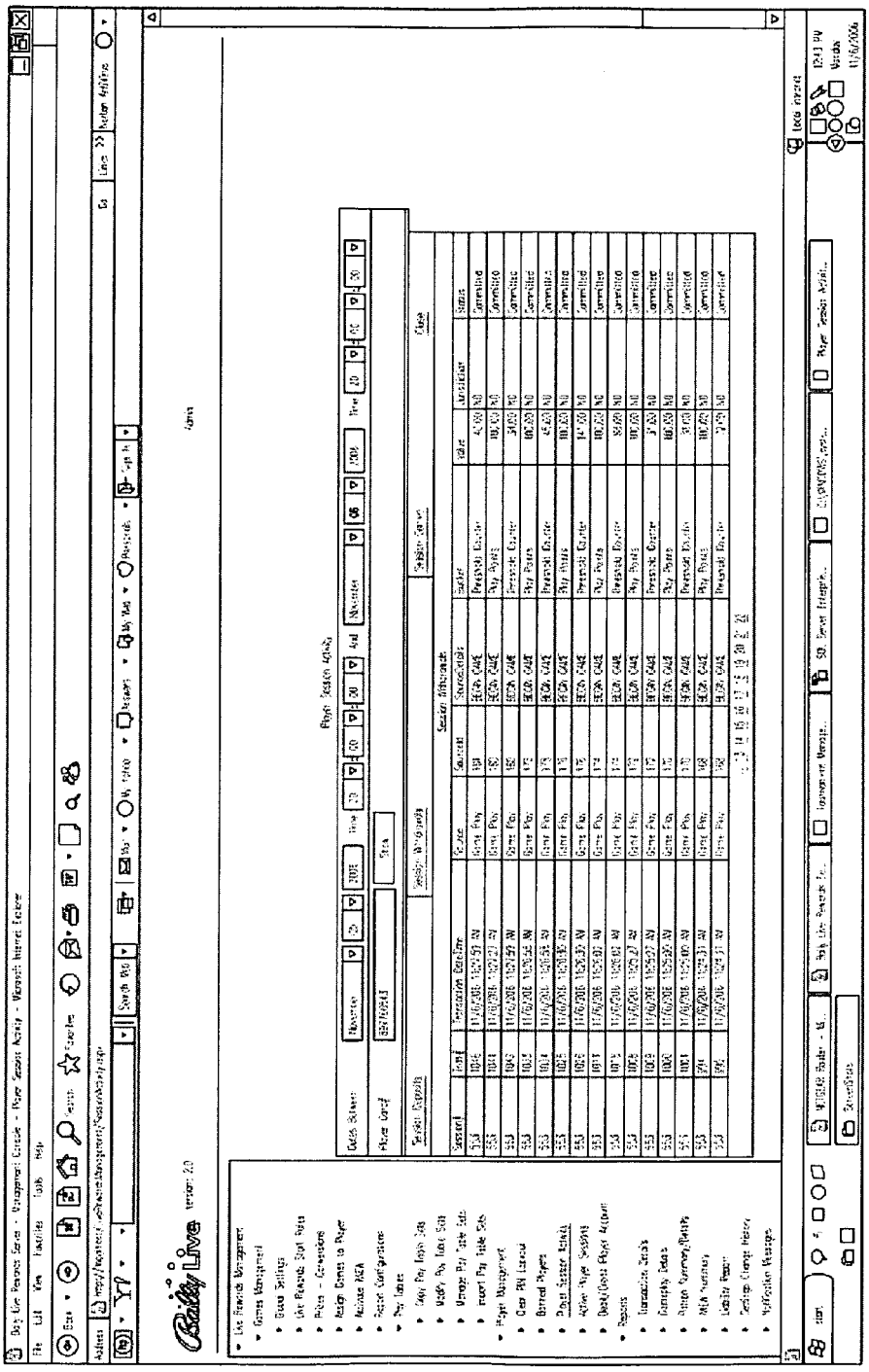


FIG.41

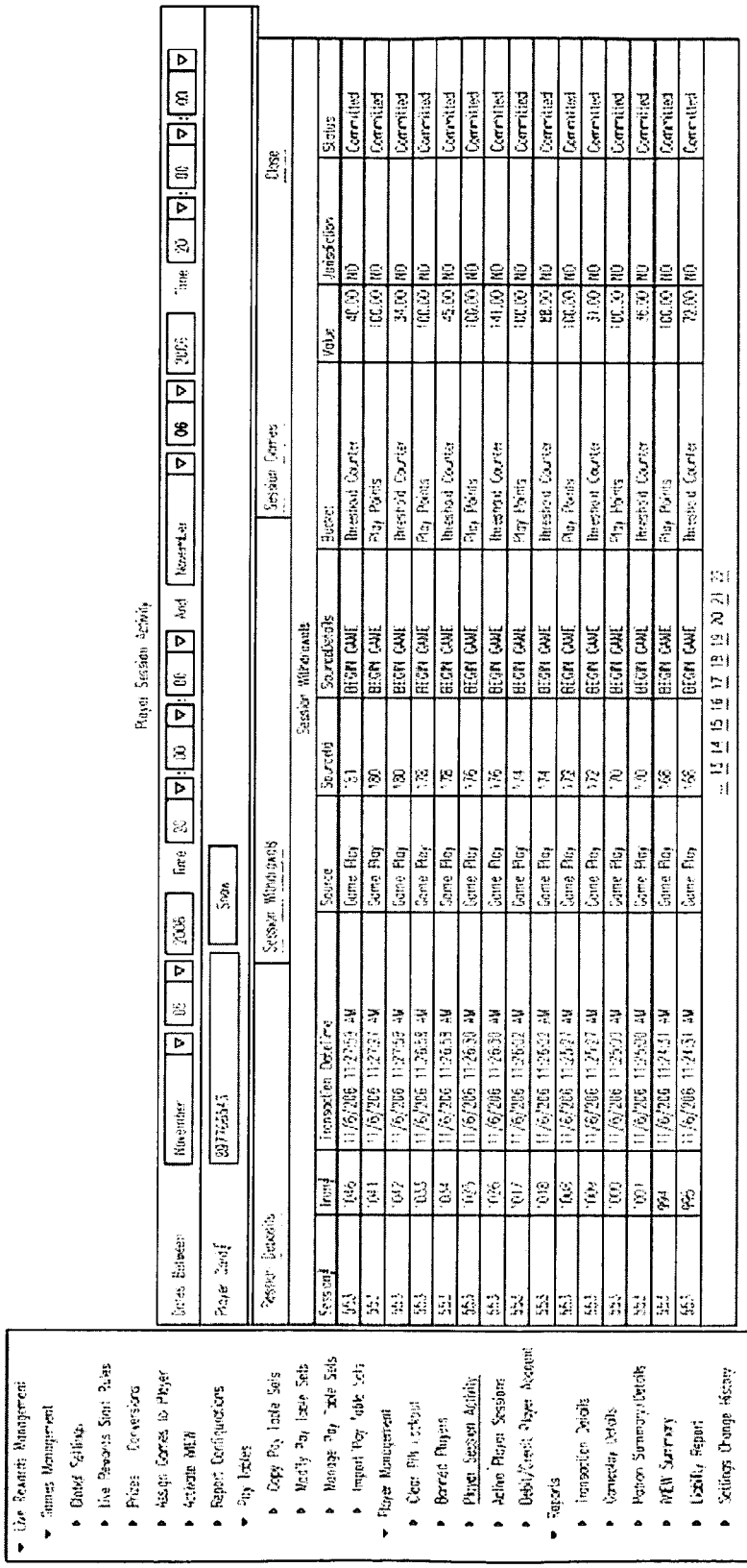

4102
Player Session Details
Session Details
Session Wins/Losses
Session Games
Close
Session Wins/Losses
Session
Transaction Date/Time
Source
Seconds
SourceDetails
Buckets
Value
Jackpotted
Status
Committed
Player Management
Games Management
Reports
Administration

FIG.41A

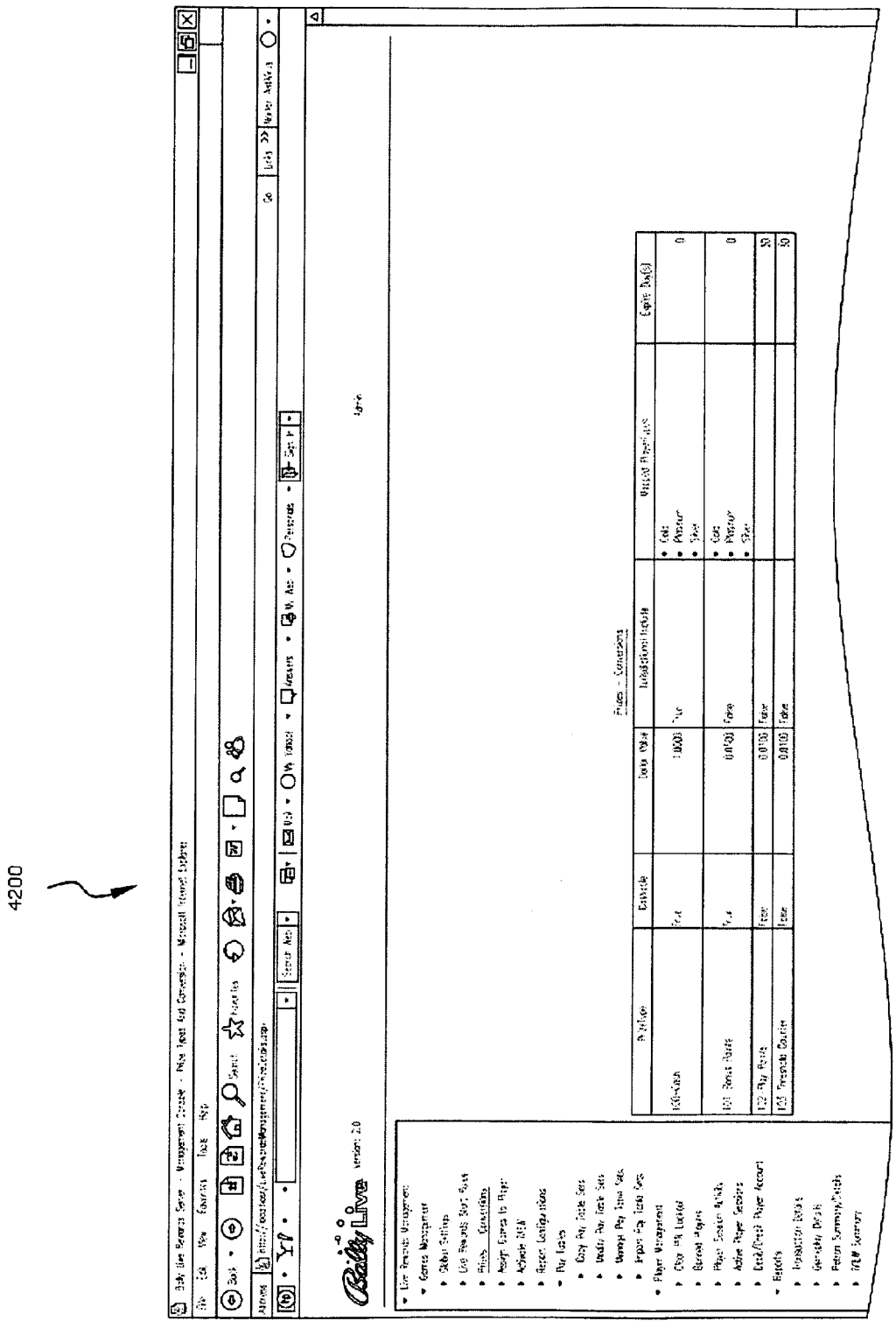


FIG.42

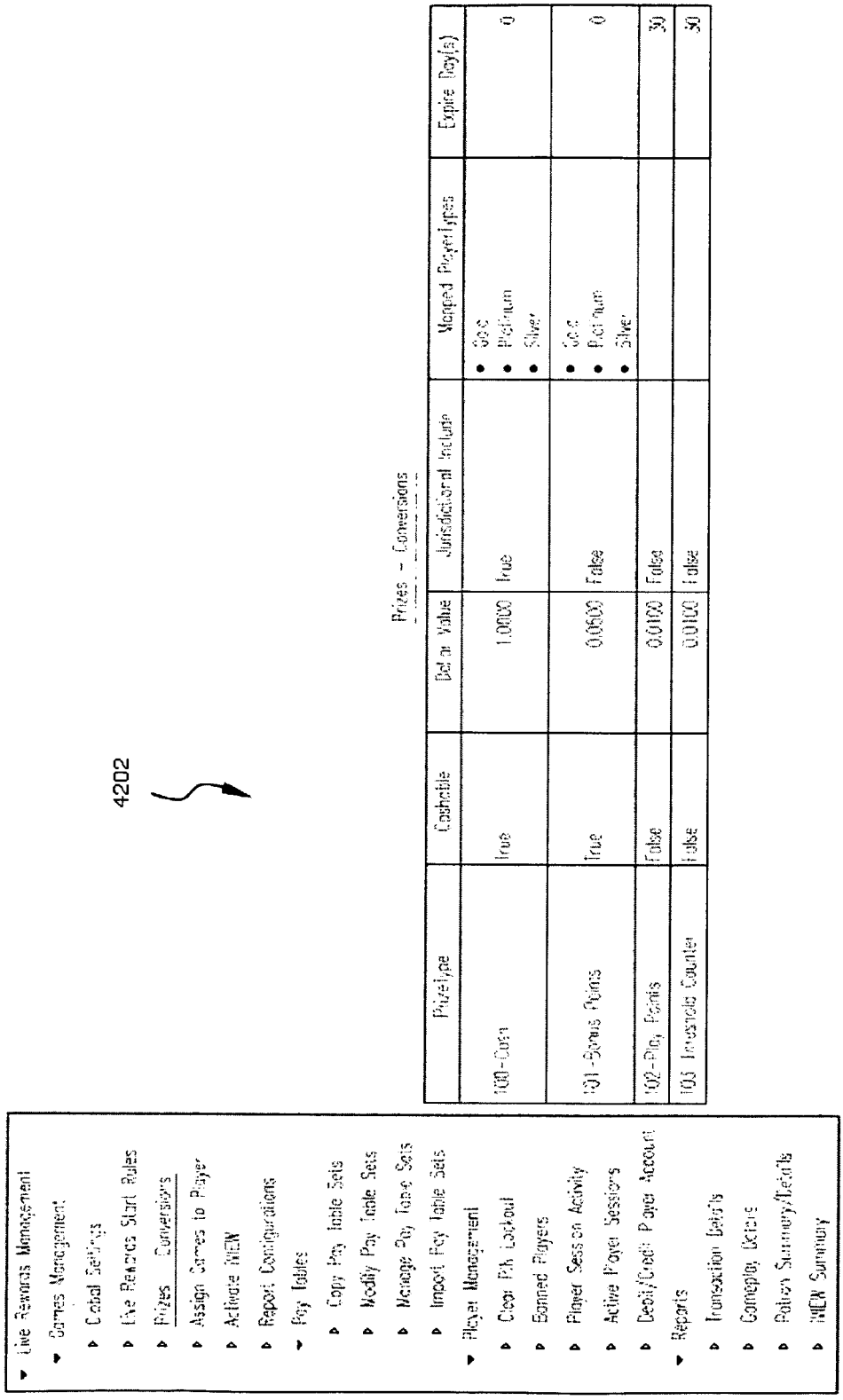

Live Rewards Management
Games Management
Global Settings
Live Rewards Start Rules
Prizes - Conversions
Assign Games to Player
Activate iNEW
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Gameplay Details
Patron Summary/Totals
iNEW Summary
4202
Prizes - Conversions
PrizeType
Cashable
Bet or Value
Jurisdictional Include
Mapped PlayerTypes
Expire Day(s)
100-Coin
true
1.0000
true
Gold
Platinum
Silver
0
101-Bonus Points
true
0.0600
false
Gold
Platinum
Silver
0
102-Play Points
false
0.0100
false
30
103-Freerolls Counter
false
0.0100
false
30

FIG.42A

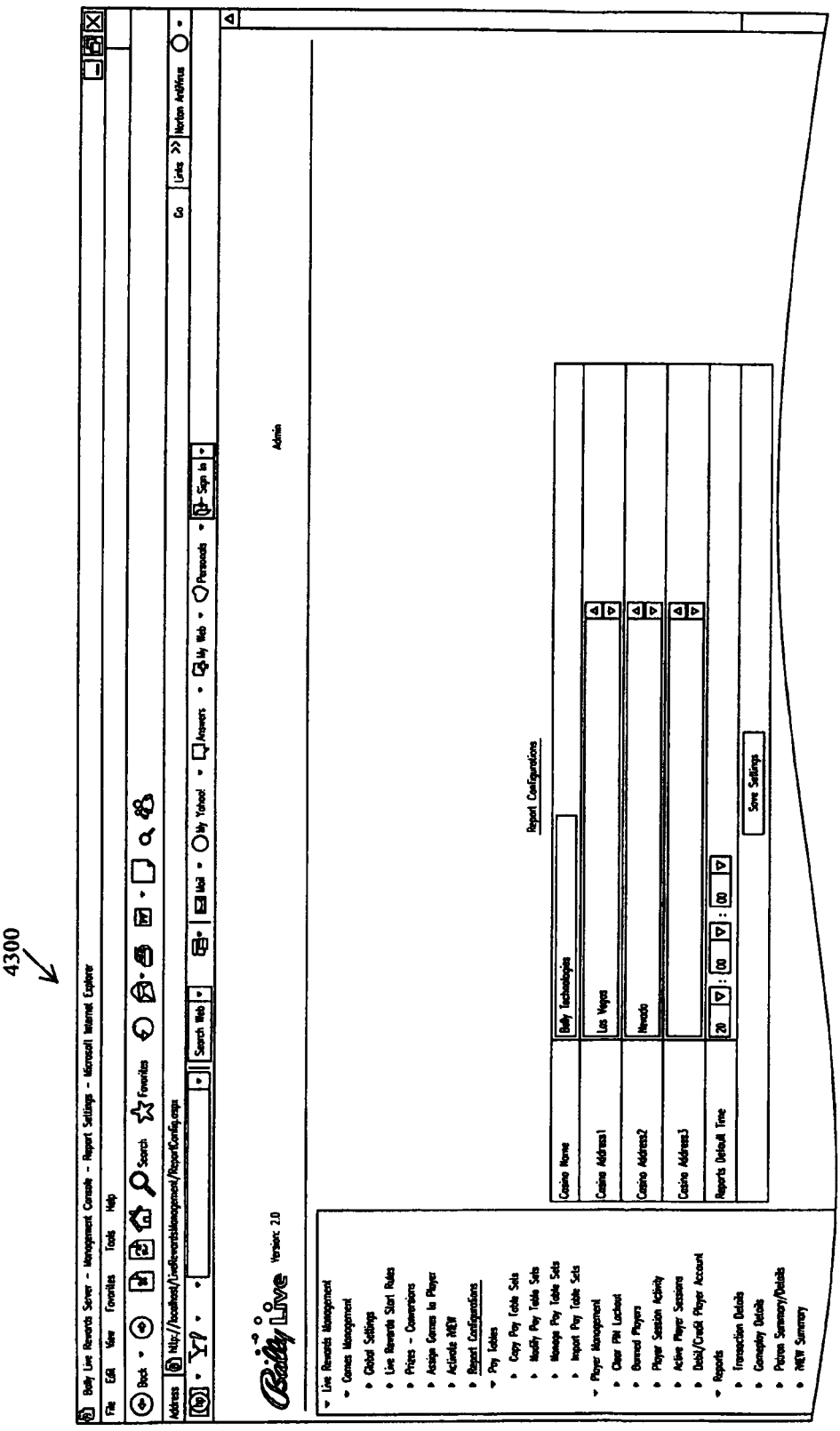

4300
Bally Live Rewards Server - Management Console - Report Settings - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://localhost/LiveRewardsManagement/ReportConfig.aspx
Search Web Mail My Yahoo! Answers My Web Personals Sign In
Go Links Norton AntiVirus
Bally Live Version: 2.0
Admin
Live Rewards Management
Games Management
Global Settings
Live Rewards Start Rules
Prizes - Conversions
Assign Games to Player
Activate MOV
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Gameplay Details
Patron Summary/Details
MOV Summary
Report Configurations
Casino Name
Bally Technologies
Casino Address1
Las Vegas
Casino Address2
Nevada
Casino Address3
Reports Default Time
20 : 00 : 00
Save Settings

FIG.43

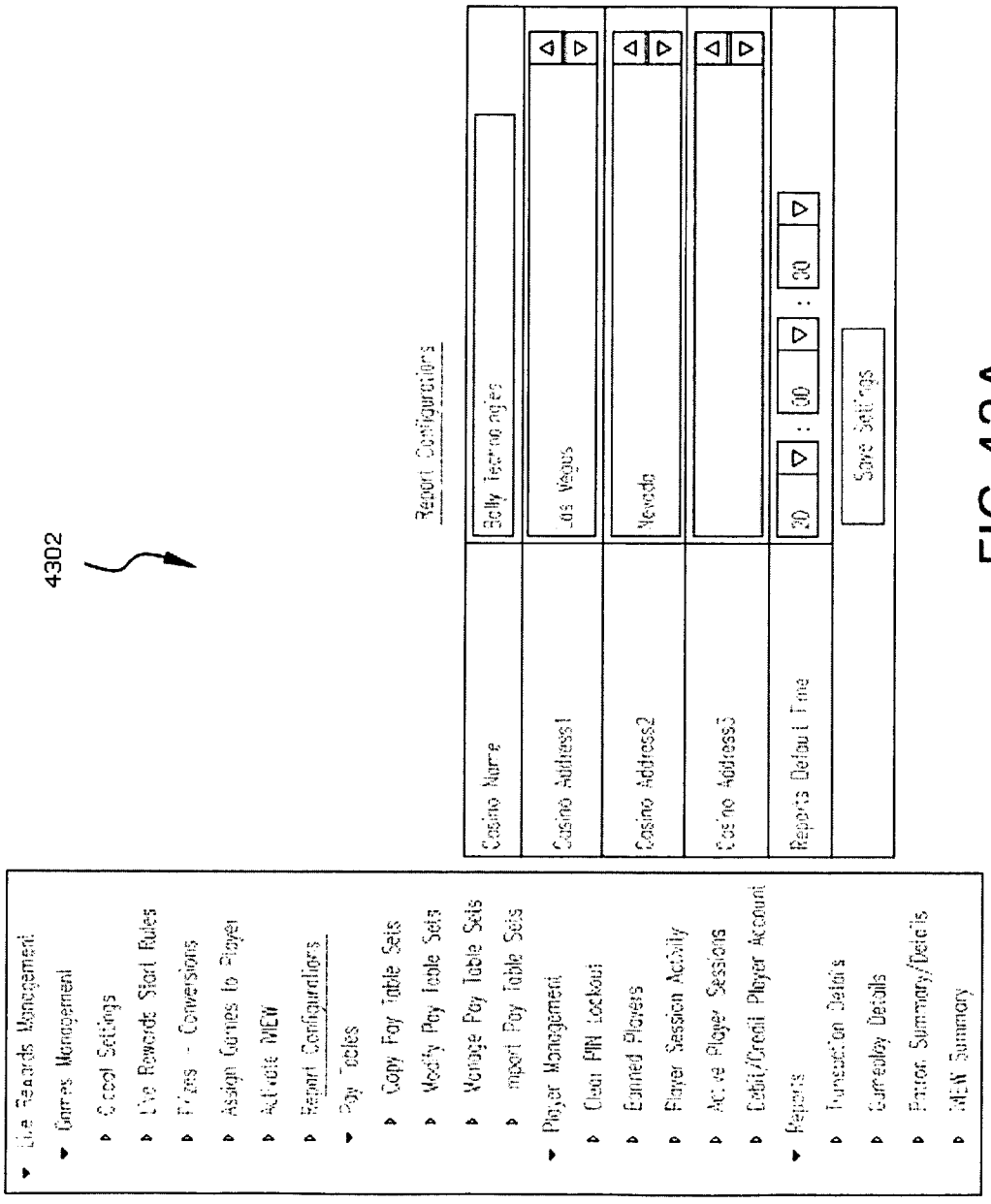

4302
Report Configurations
Casino Name
Bally Technologies
Casino Address1
Las Vegas
Casino Address2
Nevada
Casino Address3
Reports Default Time
20
00
20
Save Settings

FIG.43A

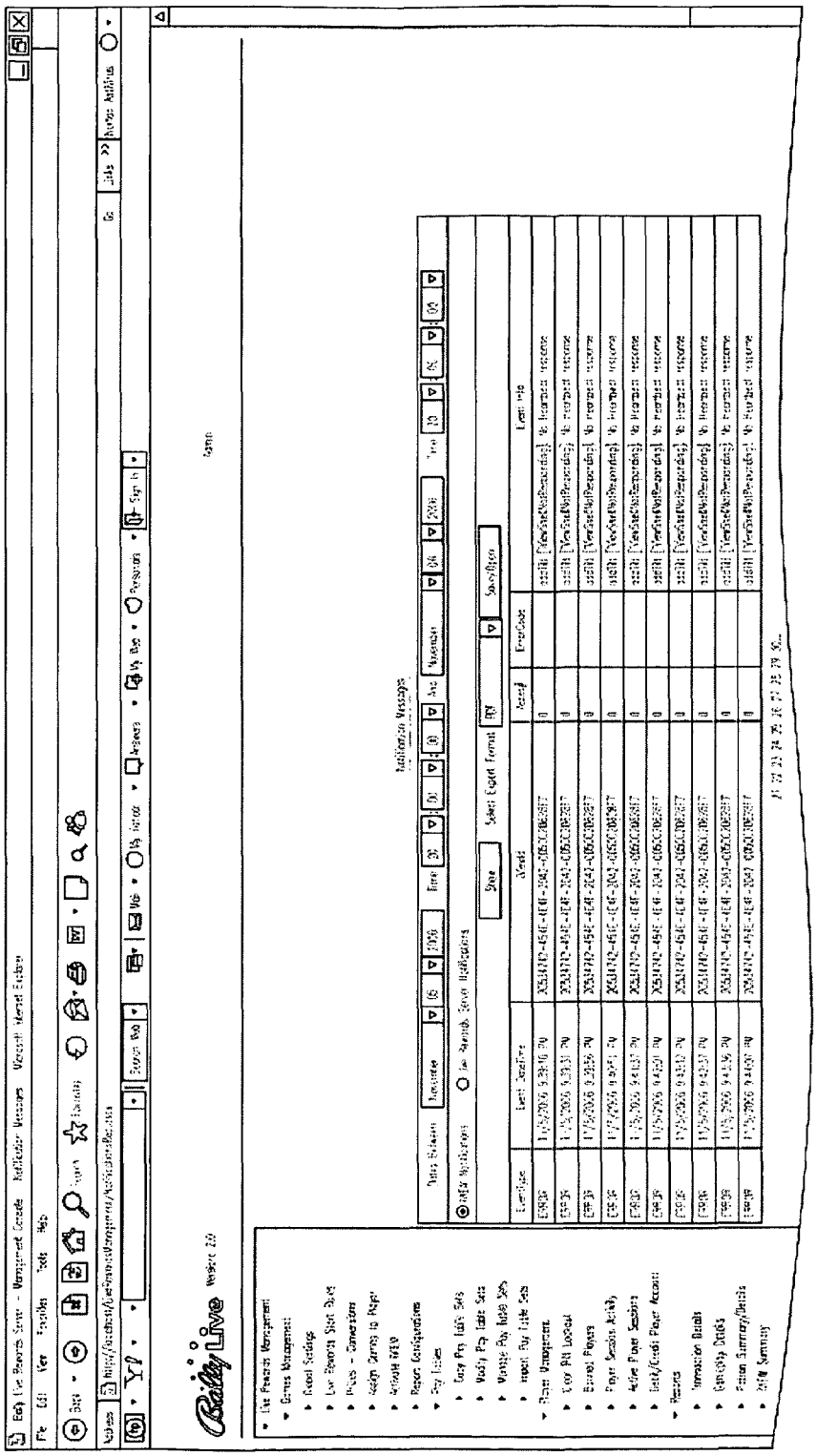


FIG.44

4402

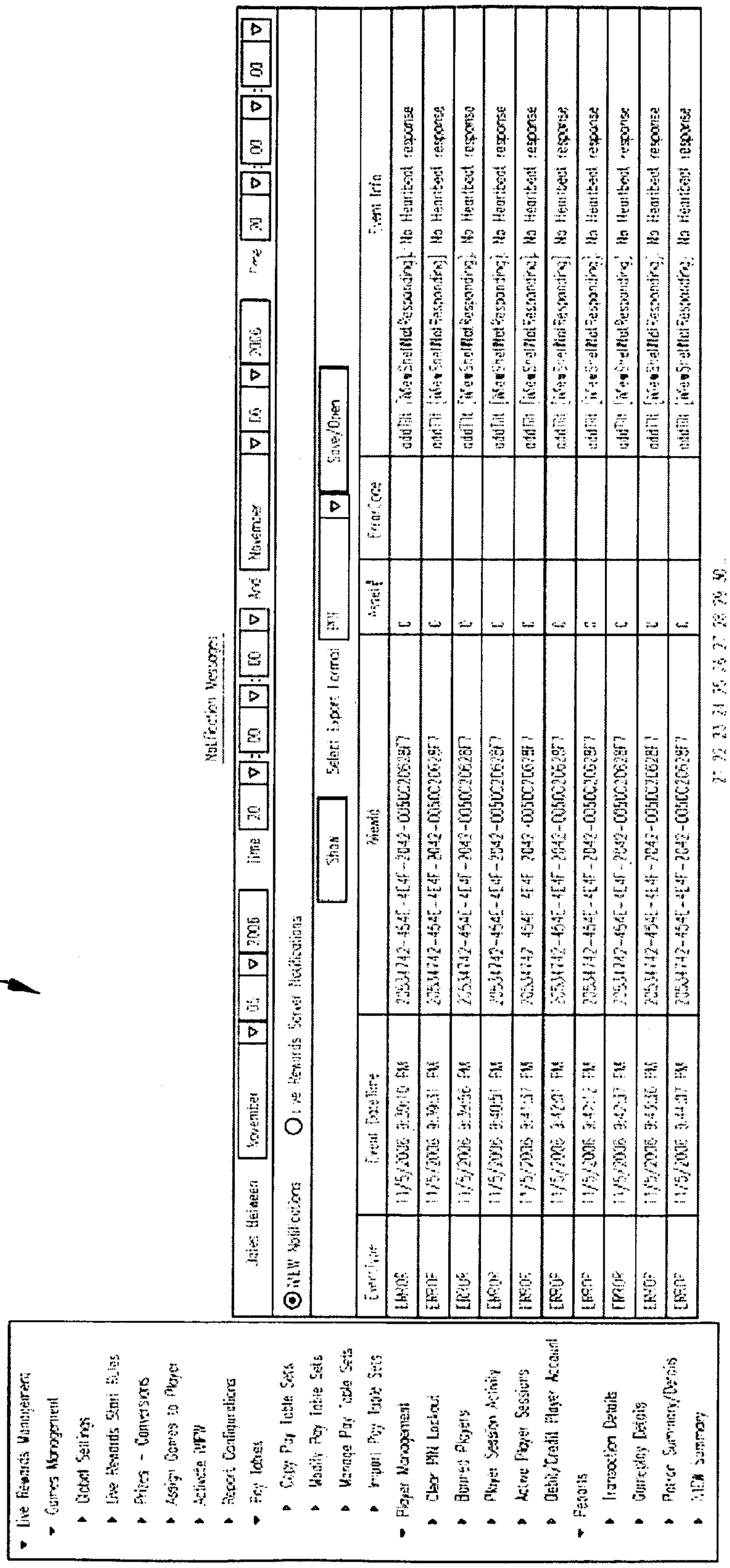

Notification Messages
Dates Between
November
2006
Time
And
NLW Notifications
Live Rewards Server Notifications
Show
Select Export Format
Save/Open
Event Type
Event Date/Time
Event Info
ERROR
No Heartbeat response
Live Rewards Management
Games Management
Global Settings
Live Rewards Start Rules
Prizes - Conversions
Assign Games to Player
Activate NFW
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Gameplay Details
Player Summary/Details

FIG.44A

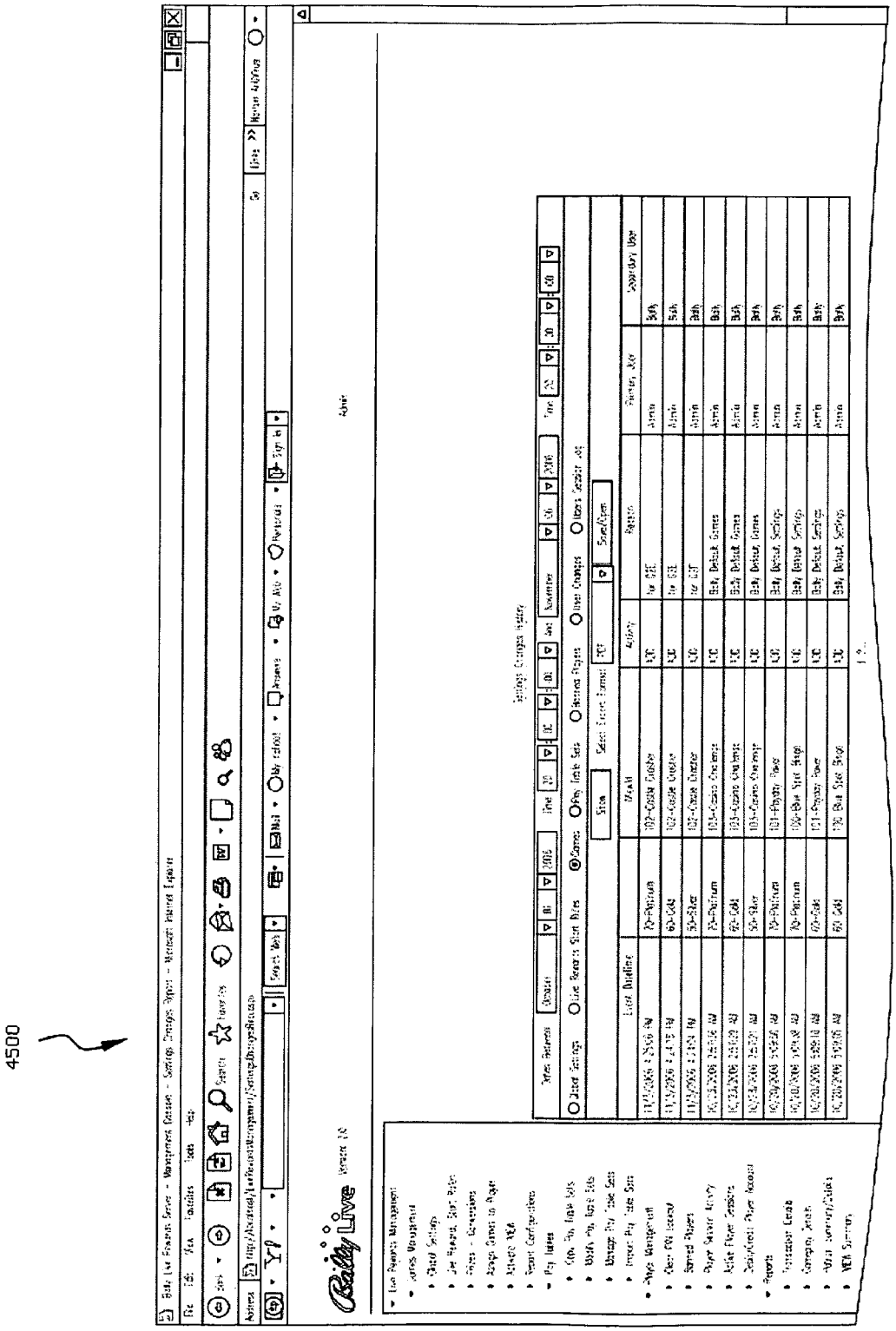


FIG.45

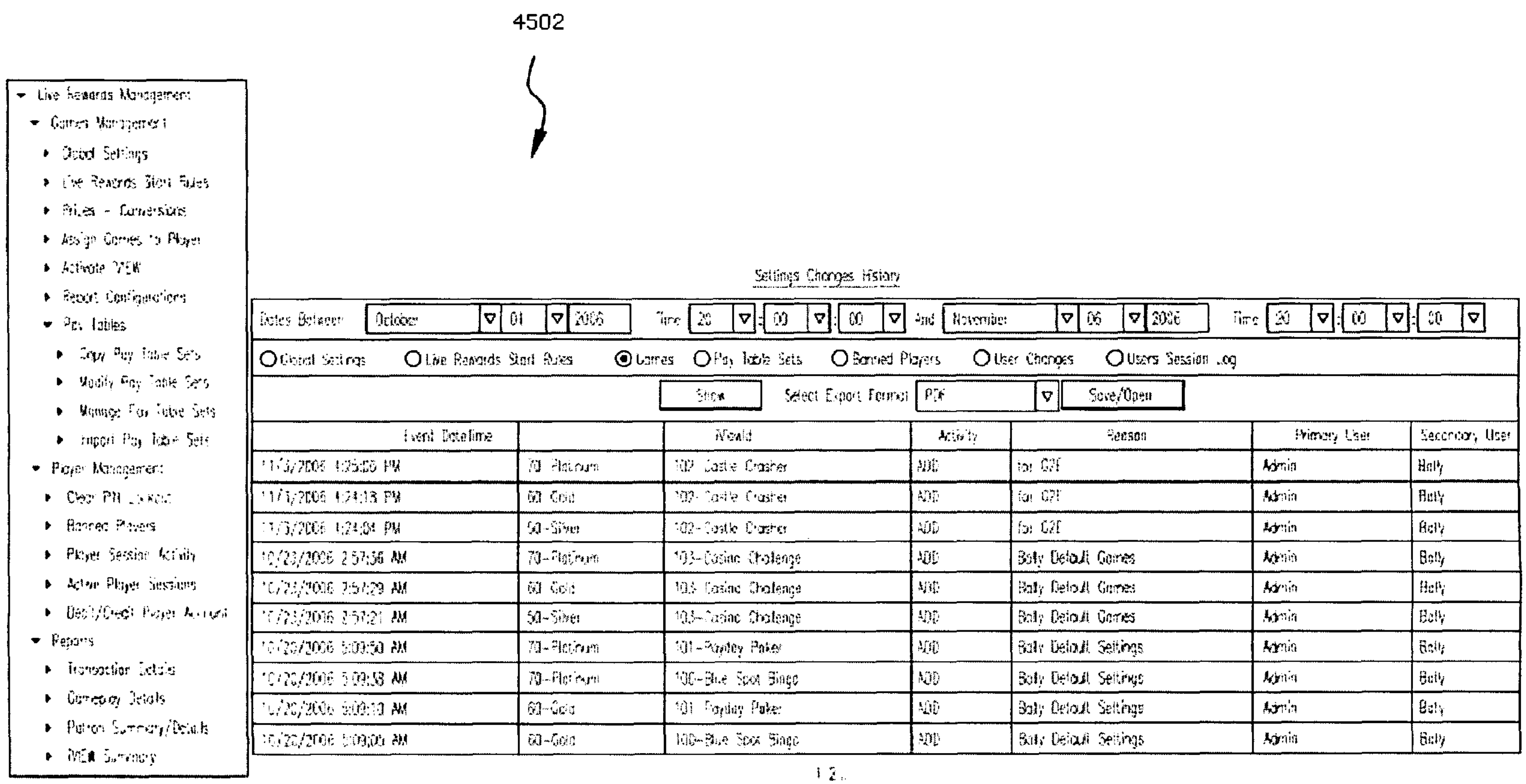

4502
Live Rewards Management
Games Management
Global Settings
Live Rewards Start Rules
Prizes - Conversions
Assign Games to Player
Activate YEW
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Company Details
Patron Summary/Details
YEW Summary
Settings Changes History
Dates Between October 01 2006 Time 20 : 00 : 00 And November 06 2006 Time 20 : 00 : 00
Global Settings
Live Rewards Start Rules
Games
Pay Table Sets
Banned Players
User Changes
Users Session Log
Show
Select Export Format PDF
Save/Open
Event Datetime
World
Activity
Reason
Primary User
Secondary User
11/3/2006 1:25:55 PM 70-Platinum 102-Castle Crasher ADD for G2E Admin Bally
11/3/2006 1:24:18 PM 60-Gold 102-Castle Crasher ADD for G2E Admin Bally
11/3/2006 1:24:04 PM 50-Silver 102-Castle Crasher ADD for G2E Admin Bally
10/23/2006 2:57:36 AM 70-Platinum 103-Casino Challenge ADD Bally Default Games Admin Bally
10/23/2006 2:57:29 AM 60-Gold 103-Casino Challenge ADD Bally Default Games Admin Bally
10/23/2006 2:57:21 AM 50-Silver 103-Casino Challenge ADD Bally Default Games Admin Bally
10/20/2006 5:09:50 AM 70-Platinum 101-Payday Poker ADD Bally Default Settings Admin Bally
10/20/2006 5:09:38 AM 70-Platinum 100-Blue Spot Bingo ADD Bally Default Settings Admin Bally
10/20/2006 5:09:10 AM 60-Gold 101-Payday Poker ADD Bally Default Settings Admin Bally
10/20/2006 5:09:00 AM 60-Gold 100-Blue Spot Bingo ADD Bally Default Settings Admin Bally
1 2

FIG.45A

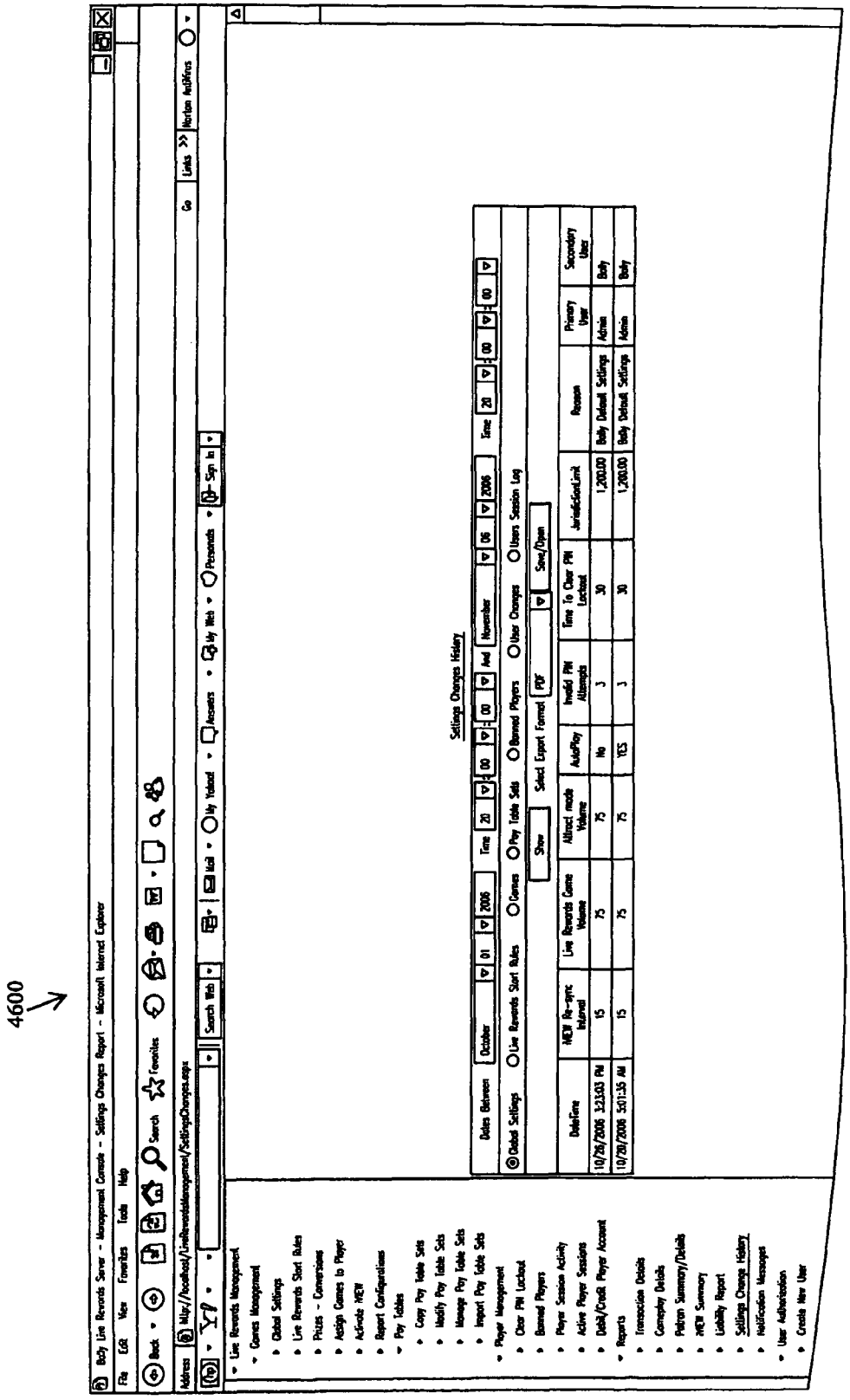

4600
Bally Live Rewards Server - Management Console - Settings Changes Report - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address http://localhost/LiveRewardsManagement/SettingsChanges.aspx
Live Rewards Management
Games Management
Global Settings
Live Rewards Start Rules
Prizes - Conversions
Assign Games to Player
Activate MEM
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Complimentary Details
Patron Summary/Details
MEM Summary
Liability Report
Settings Change History
Notification Messages
User Authorization
Create New User
Settings Changes History
Dates Between October 01 2006 Time 20 00 00 And November 06 2006 Time 20 00 00
Global Settings Live Rewards Start Rules Games Pay Table Sets Banned Players User Changes Users Session Log
Show Select Export Format PDF Save/Open
DateTime | MEM Re-sync Interval | Live Rewards Game Volume | Attract mode Volume | AutoPlay | Invalid PIN Attempts | Time To Clear PIN Lockout | JurisdictionLimit | Reason | Primary User | Secondary User
10/26/2006 12:10:03 PM | 15 | 75 | 75 | No | 3 | 30 | 1,200.00 | Bally Default Settings | Admin | Bally
10/28/2006 5:01:35 AM | 15 | 75 | 75 | YES | 3 | 30 | 1,200.00 | Bally Default Settings | Admin | Bally

FIG.46

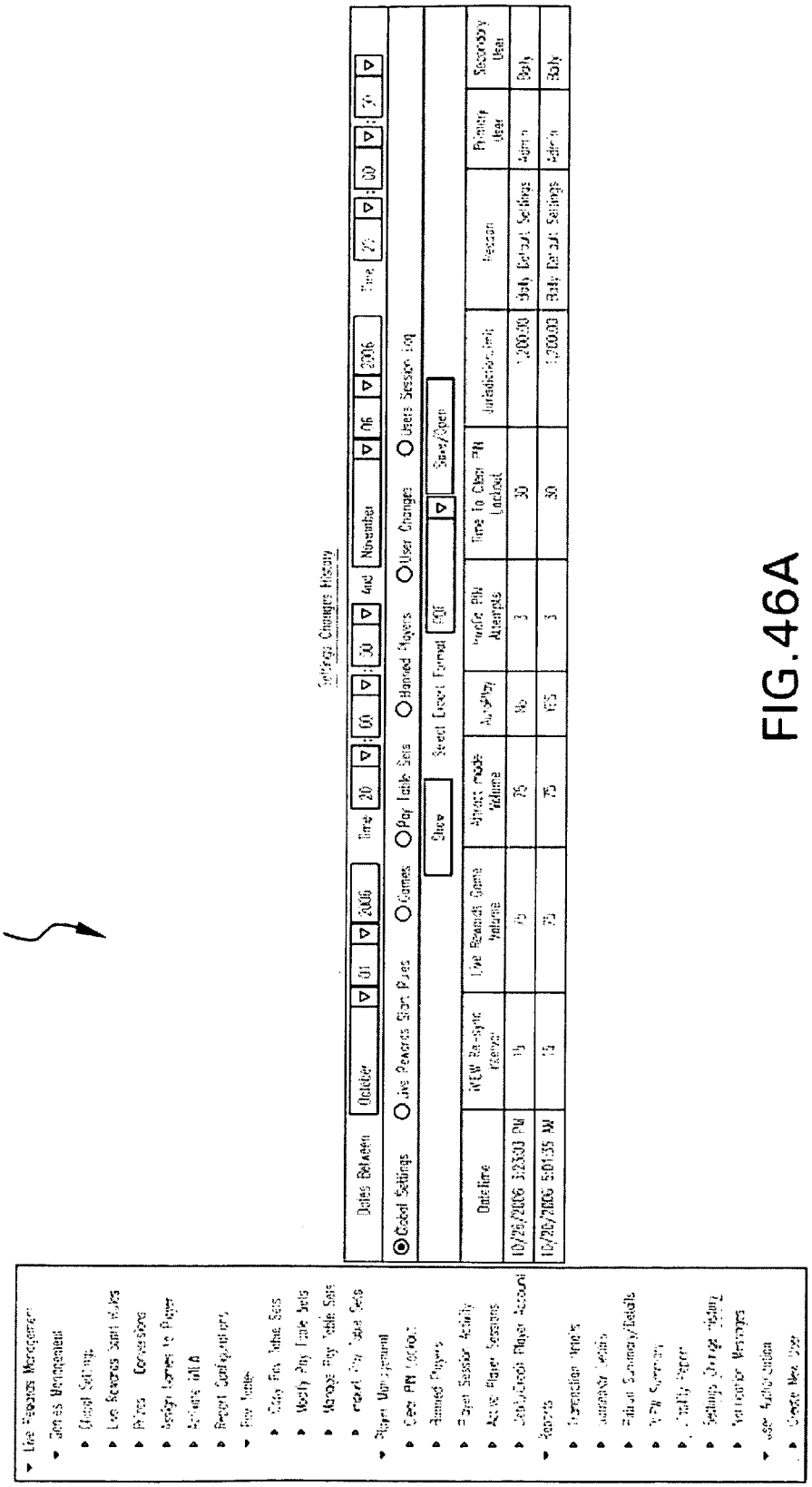


FIG.46A

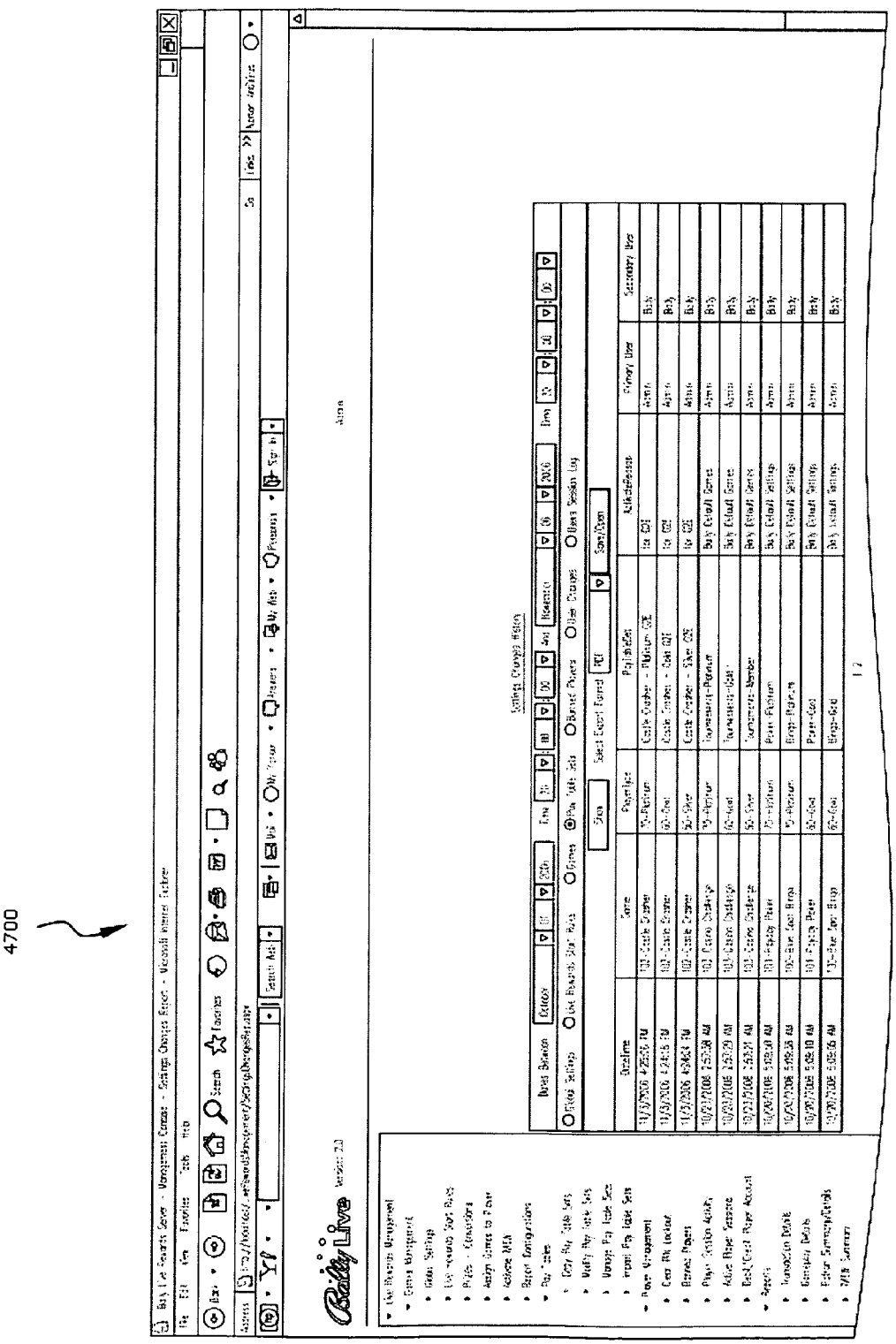


FIG.47

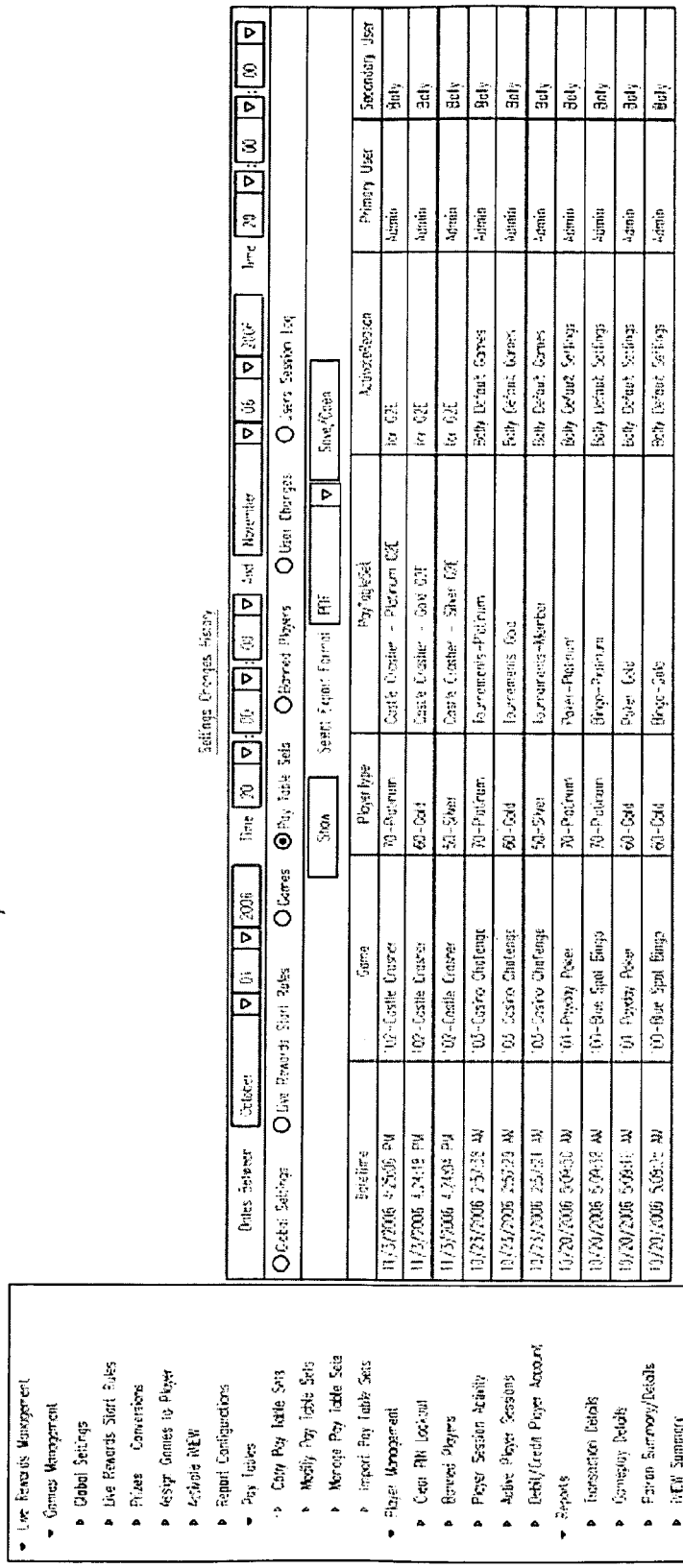

4702
Live Rewards Management
Games Management
Global Settings
Live Rewards Start Rules
Prizes Conversions
Assign Games to Player
Activate iNEW
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Merge Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Gameplay Details
Patron Summary/Details
iNEW Summary
Settings Changes History
Dates Between
Global Settings
Live Rewards Start Rules
Games
Pay Table Sets
Banned Players
User Changes
Users Session Log
Show
Export Report Format
PDF
Save/Open
Datetime
Game
Player Type
Pay Table Set
Action/Session
Primary User
Secondary User

FIG.47A

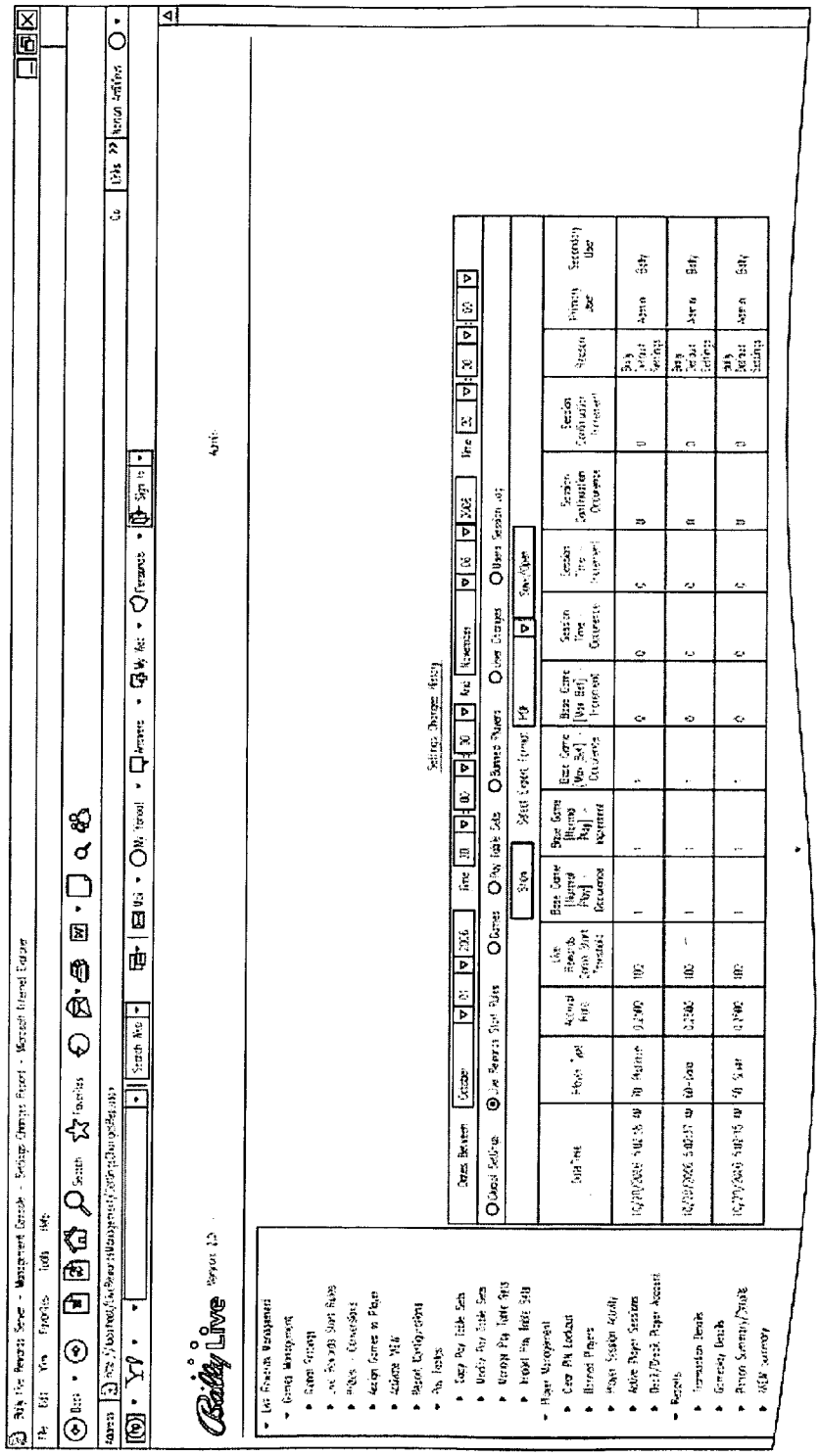


FIG.48

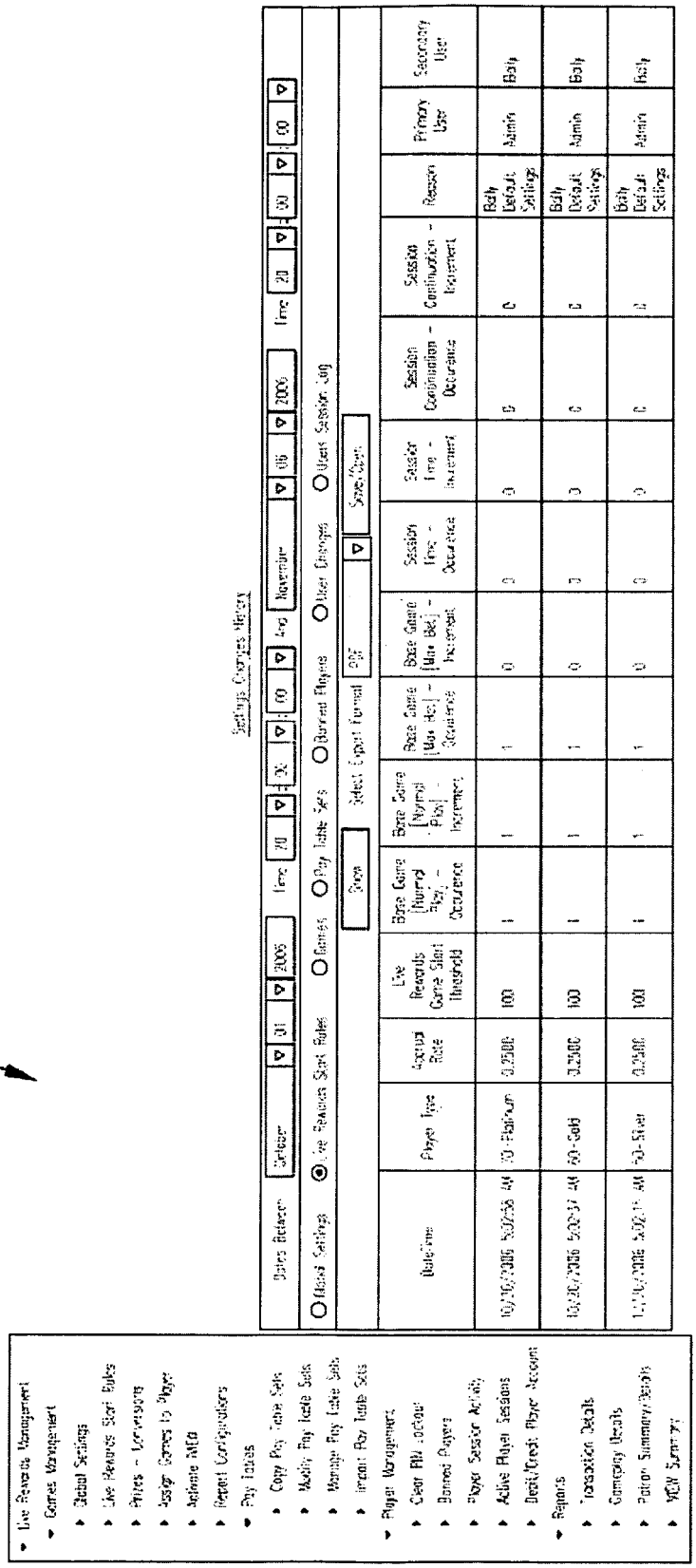

4802
Live Rewards Management
Games Management
Global Settings
Live Rewards Start Rules
Prizes - Inventory
Assign Games to Player
Activate MFD
Report Configurations
Play Tokens
Copy Play Table Sets
Modify Play Table Sets
Manage Play Table Sets
Import Play Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Currency Details
Patron Summary Details
MOW Summary
Settings Changes History
Dates Between
Global Settings
Live Rewards Start Rules
Games
Play Table Sets
Current Players
User Changes
Users Session Log
Show
Select Export Format
PDF
Save/Open
Date/Time
Player Type
Accrual Rate
Live Rewards Game Start Threshold
Base Game [Hurray Play] - Occurrence
Base Game [Hurray Play] - Increment
Base Game [Max Bet] - Occurrence
Base Game [Max Bet] - Increment
Session Time - Occurrence
Session Time - Increment
Session Continuation - Occurrence
Session Continuation - Increment
Reason
Primary User
Secondary User
Bally Default Settings
Admin
Bally

FIG.48A

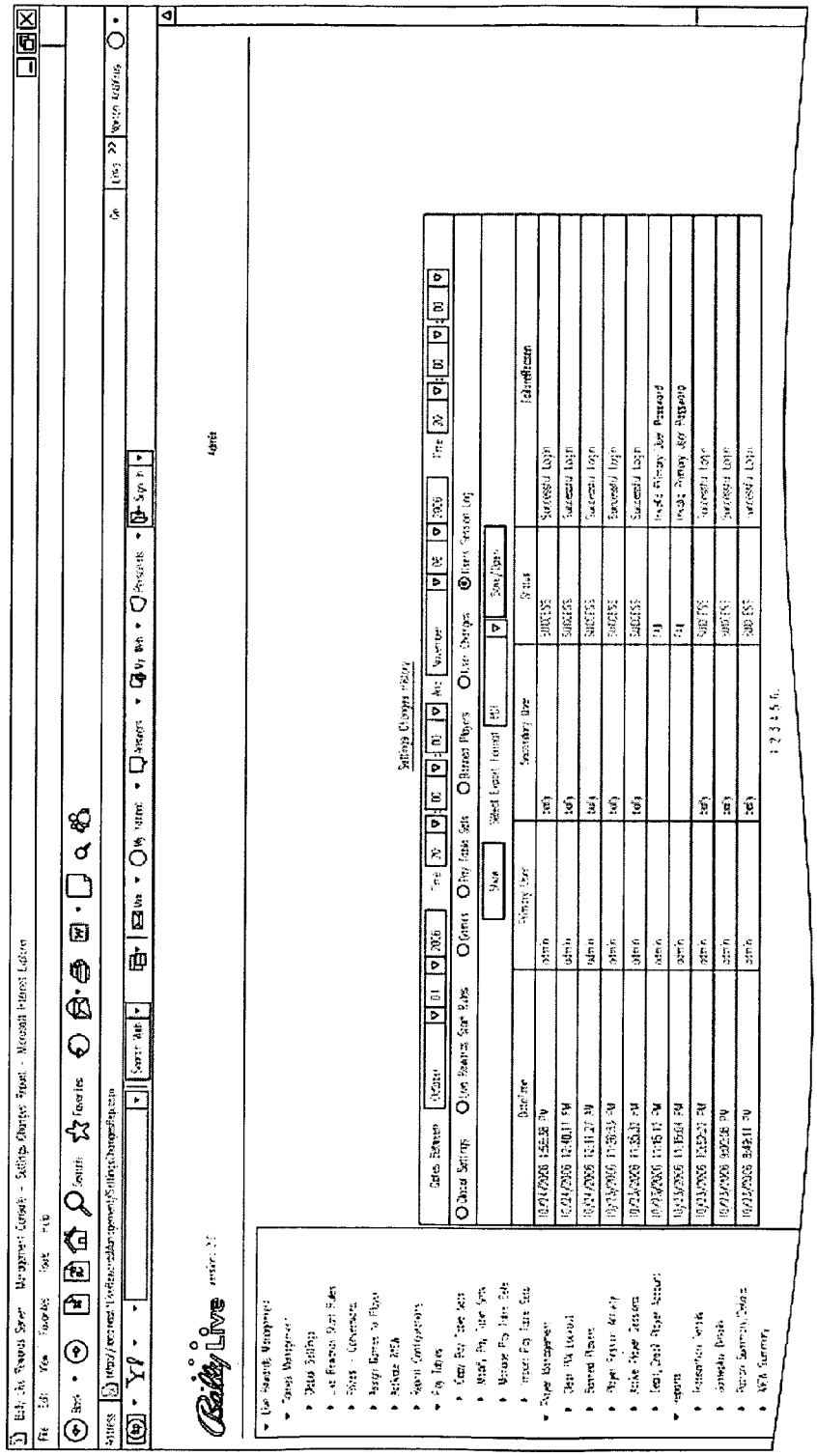


FIG.49

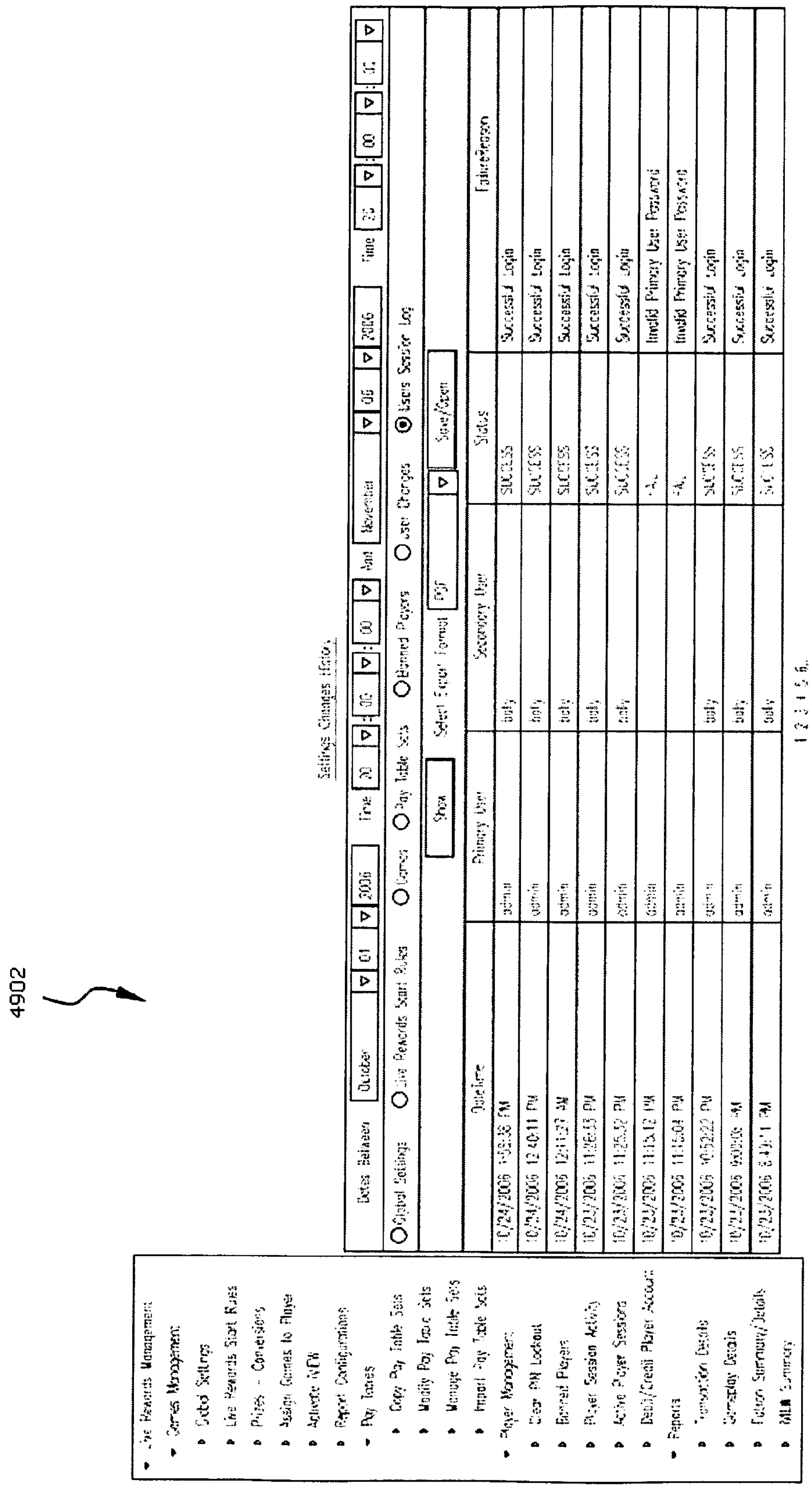

4902
Settings Changes History
Dates Between
Time
And
Global Settings
Games
Pay Table Sets
Banned Players
User Changes
Users Session Log
Show
Select Export Format
PDF
Save/Open
Date/Time
Primary User
Secondary User
Status
FailureReason
Successful Login
Invalid Primary User Password
Games Management
Global Settings
Prizes - Conversions
Assign Games to Player
Activate NPW
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Reports
Transaction Details
Gameplay Details
MLM Summary

FIG.49A

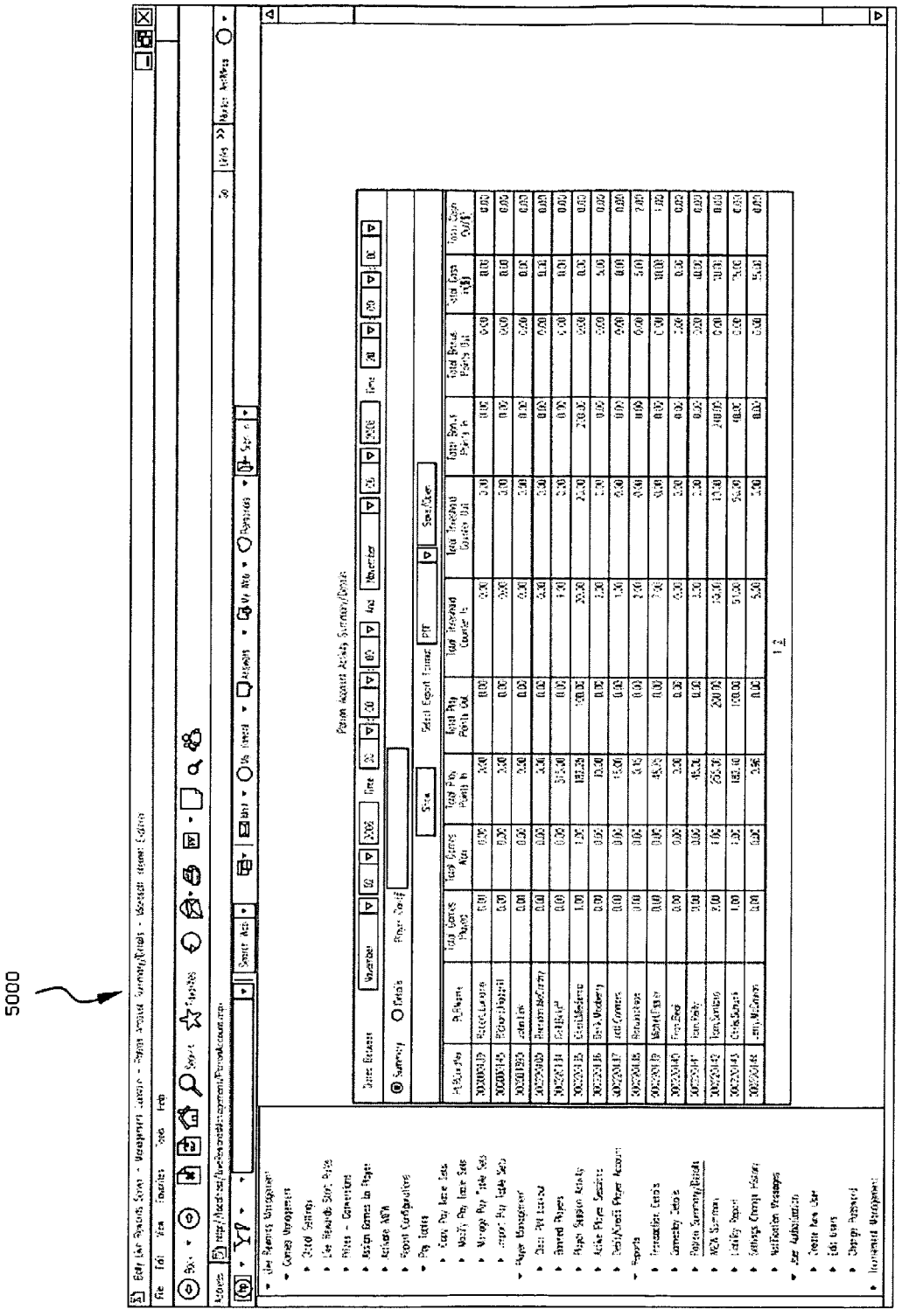


FIG. 50

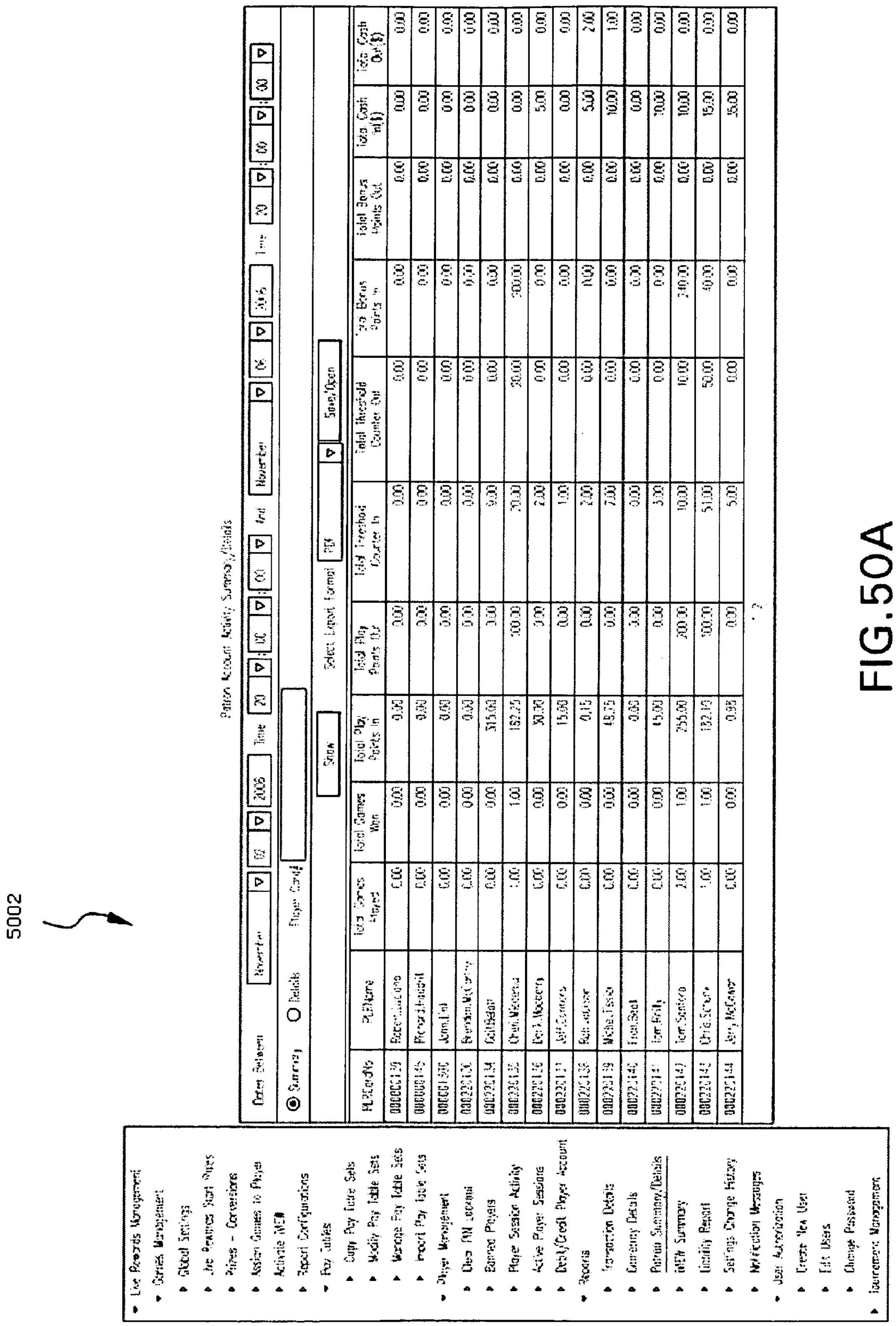

5002
Patron Account Activity Summary/Details
Summary
Details
Show
Save/Open
Live Rewards Management
Games Management
Global Settings
Pay Tables
Player Management
Reports
Patron Summary/Details
Liability Report
User Authorization
Create New User
Edit Users
Change Password
Tournament Management

FIG. 50A

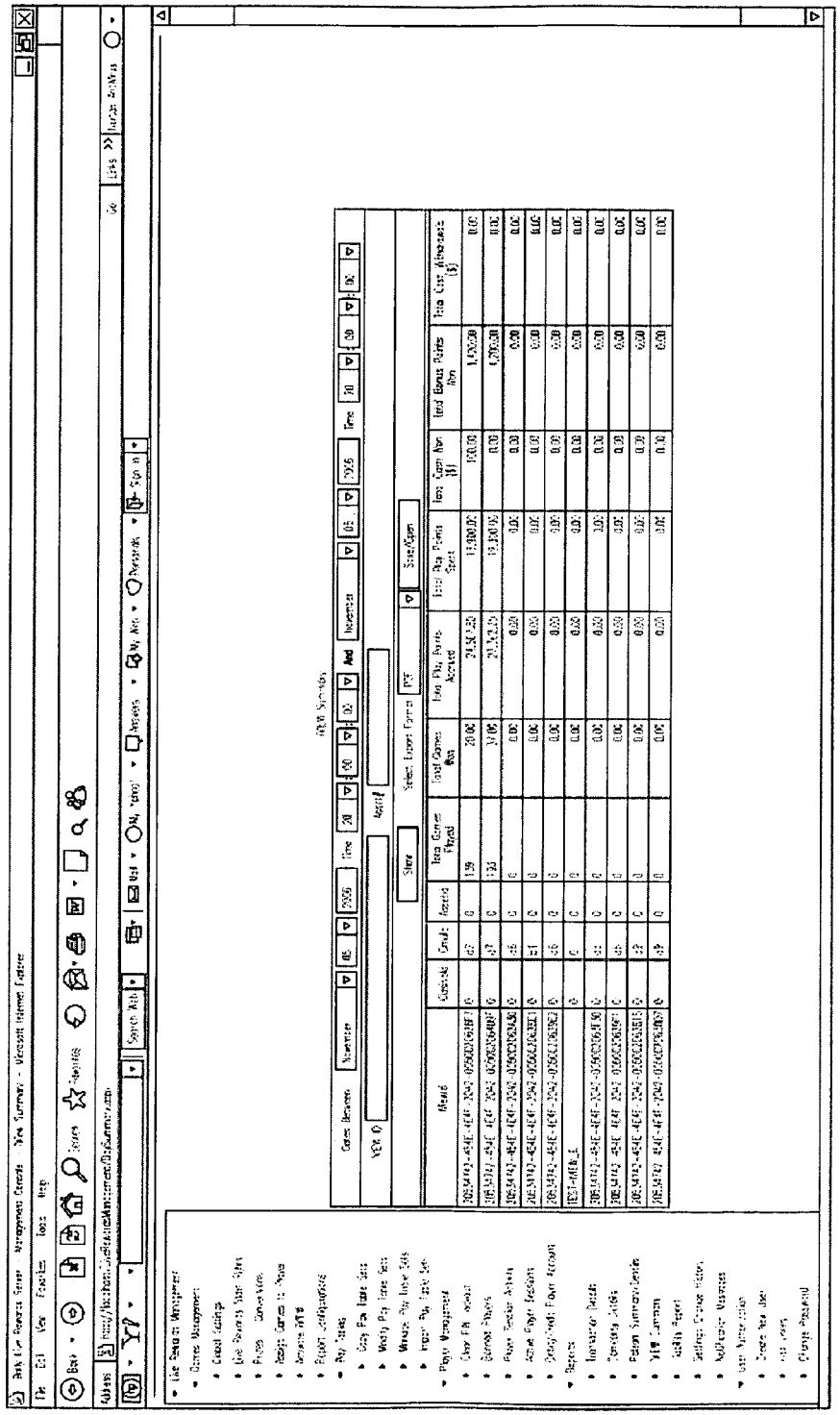


FIG.51

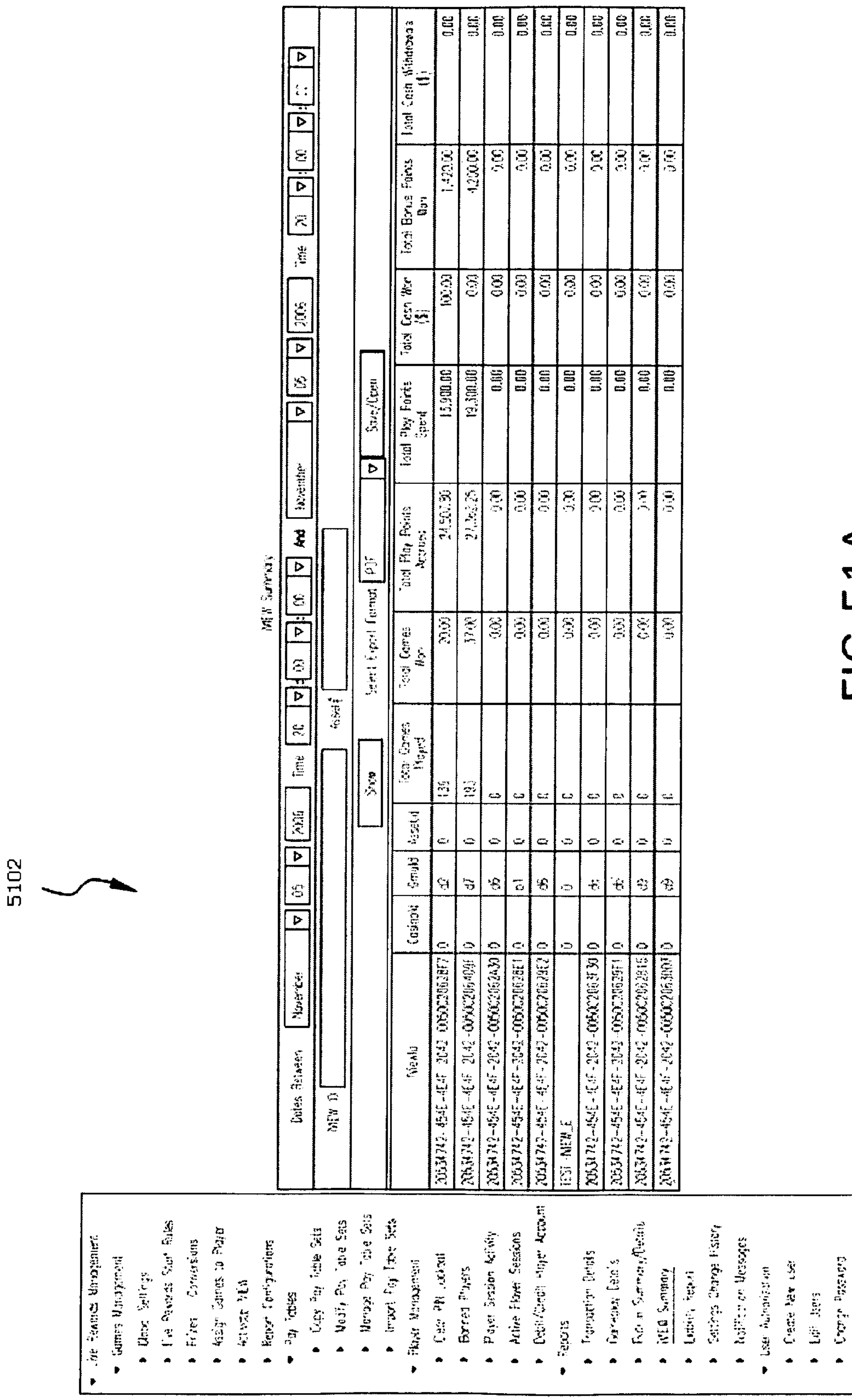

5102
Dates Between
November
2006
Time
And
Show
Select Export Format
PDF
Save/Open
Total Games Played
Total Games Won
Total Play Points Accrued
Total Play Points Spent
Total Cash Won ($)
Total Bonus Points Won
Total Cash Withdrawals ($)

FIG.51A

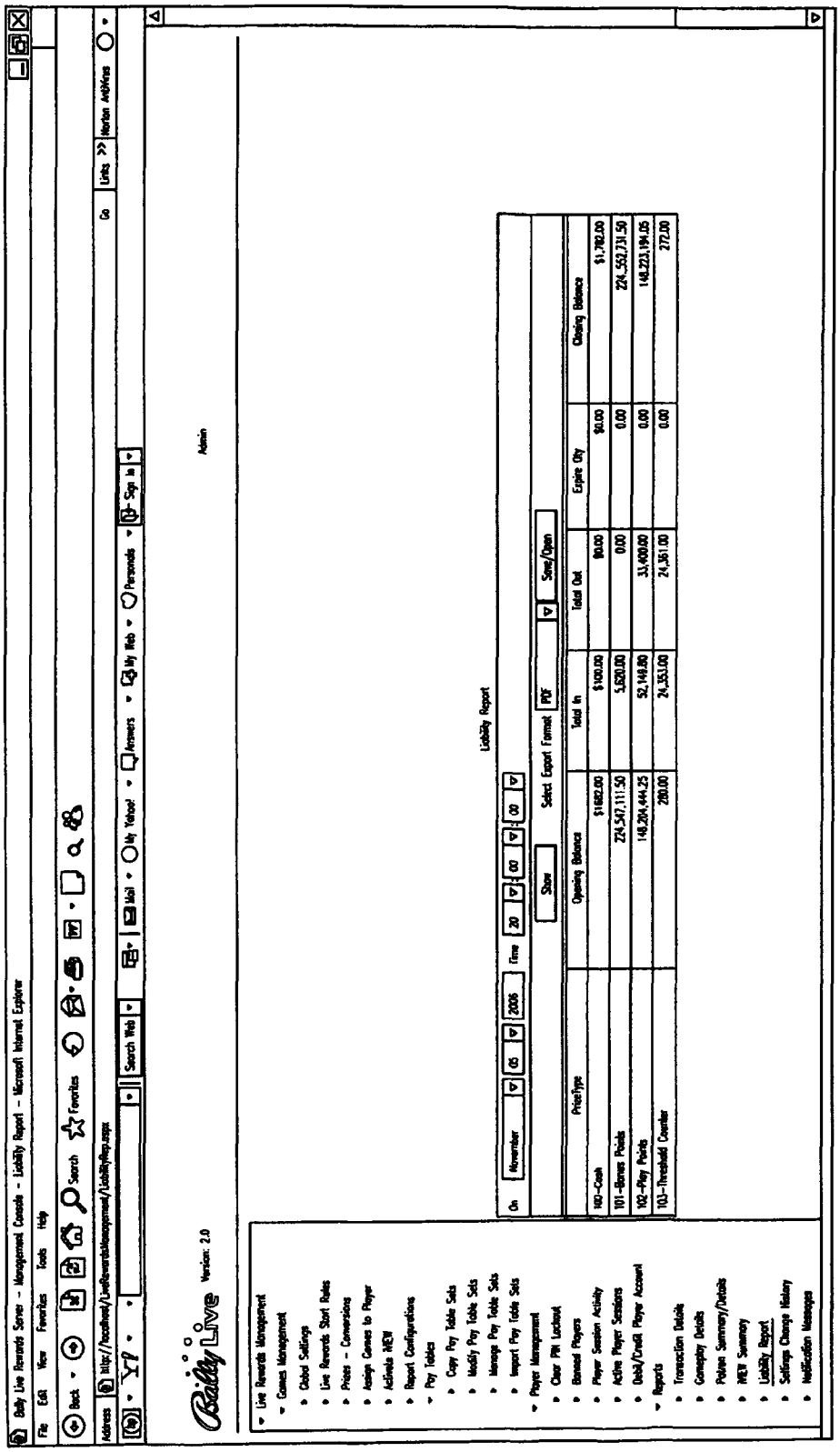

5200
Bally Live Rewards Server - Management Console - Liability Report - Microsoft Internet Explorer
Bally Live Version 2.0
Admin
Live Rewards Management
Games Management
Global Settings
Live Rewards Start Rules
Prizes - Conversions
Assign Games to Player
Activate MEM
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Gameplay Details
Patron Summary/Details
MEM Summary
Liability Report
Settings Change History
Notification Messages
Liability Report
On November 05 2006 Time 20 00 00
Show
Select Export Format PDF
Save/Open
PriceType
Opening Balance
Total In
Total Out
Expire Qty
Closing Balance
100-Cash $1682.00 $100.00 $0.00 $0.00 $1,782.00
101-Bonus Points 224,547,111.50 5,020.00 0.00 0.00 224,552,731.50
102-Play Points 148,204,444.25 52,149.80 33,400.00 0.00 148,223,194.05
103-Threshold Counter 280.00 24,353.00 24,361.00 0.00 272.00

FIG.52

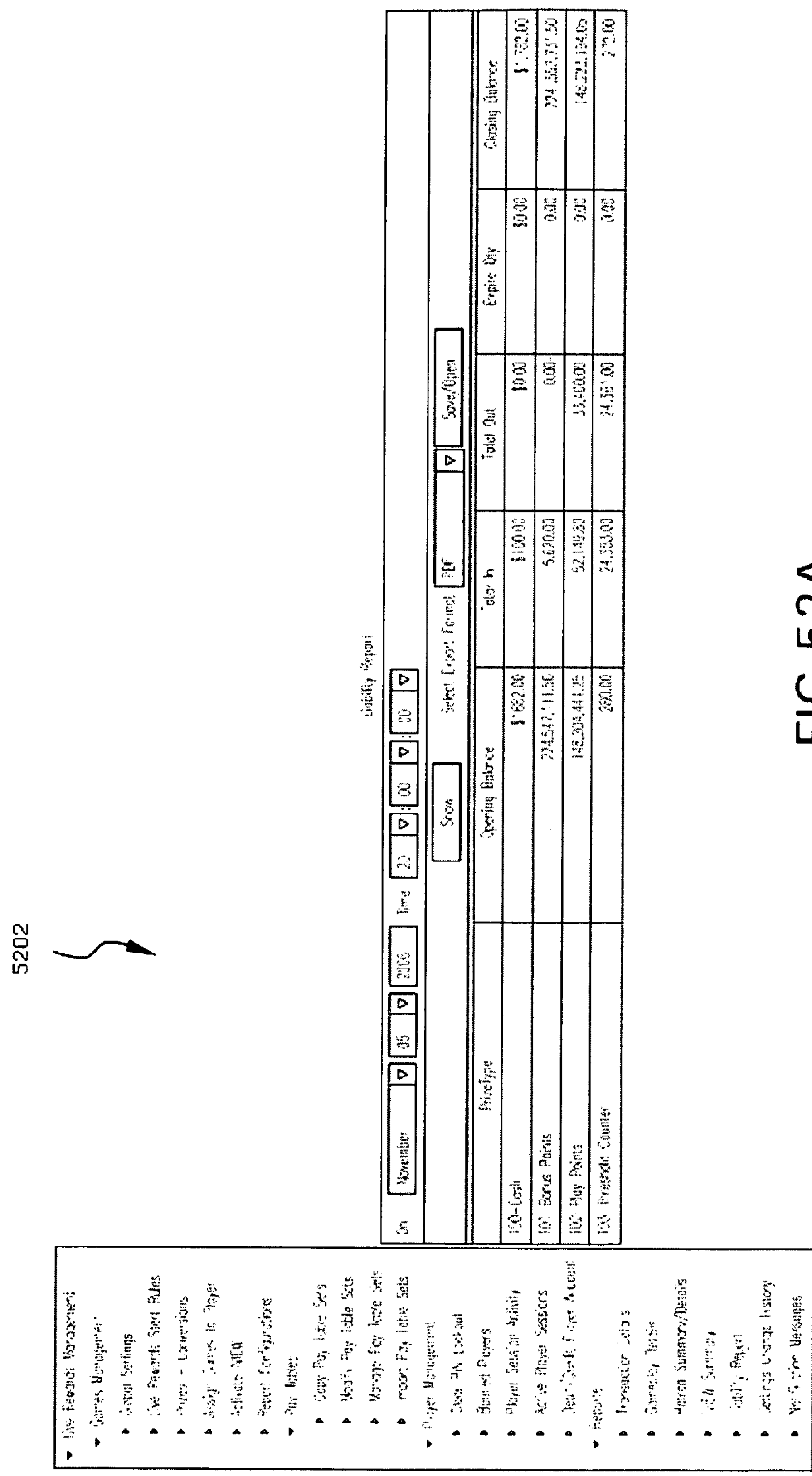

5202
Show
PDF
Save/Open
Opening Balance
Total Out
Expire Qty
Closing Balance
100-Cash
101 Bonus Points
102 Play Points
November
Time

FIG.52A

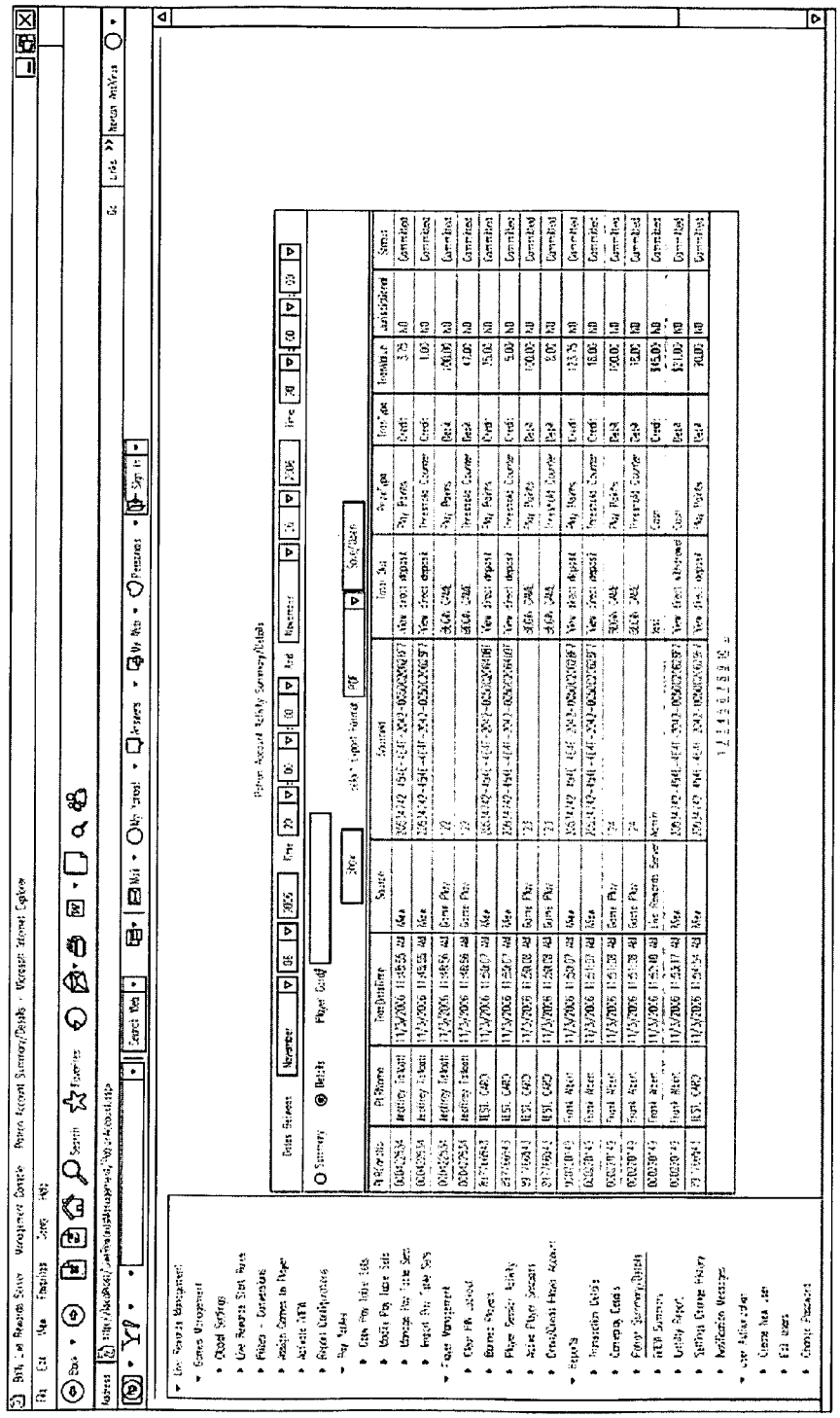


FIG.53

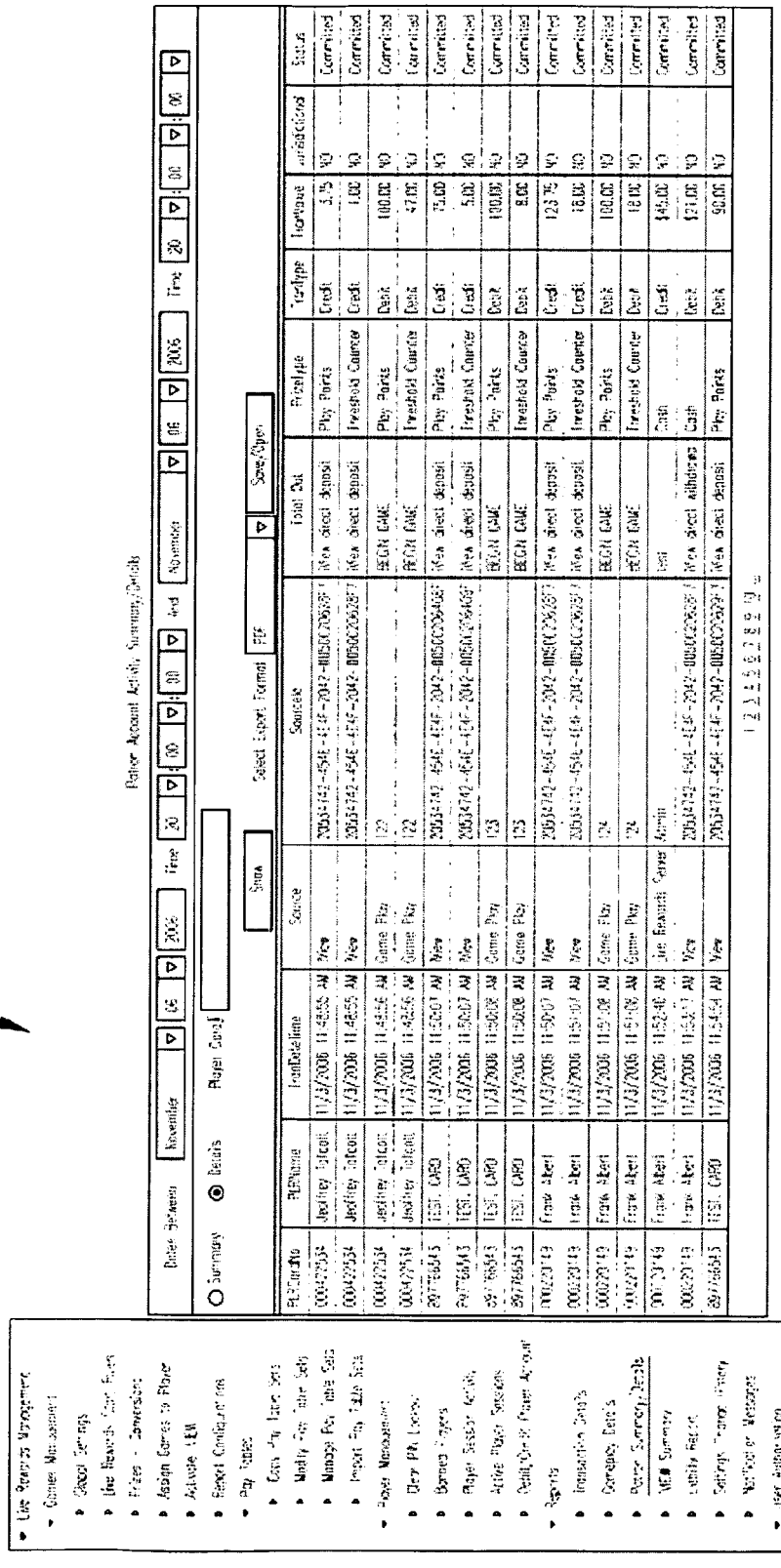


FIG.53A

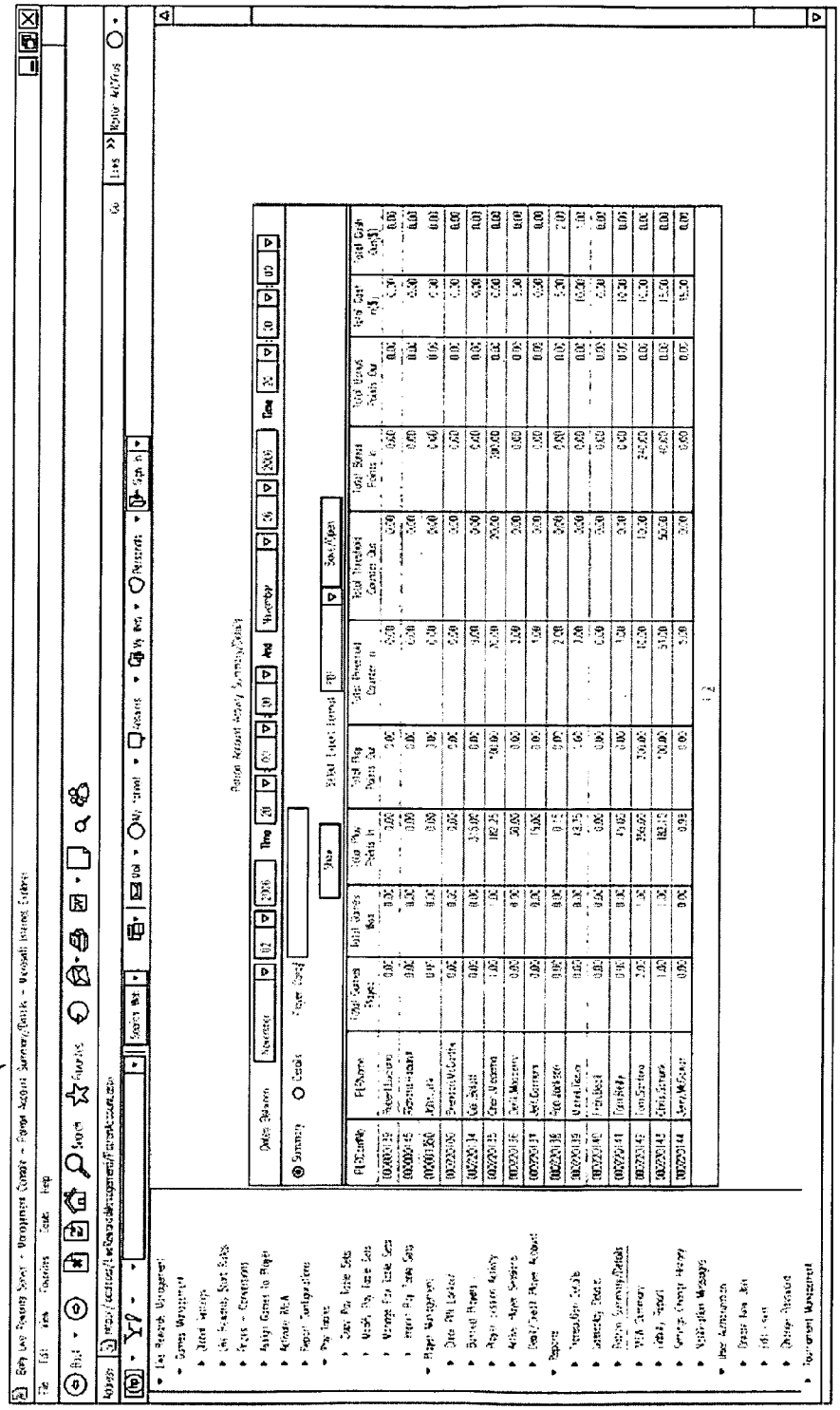


FIG.54

5402

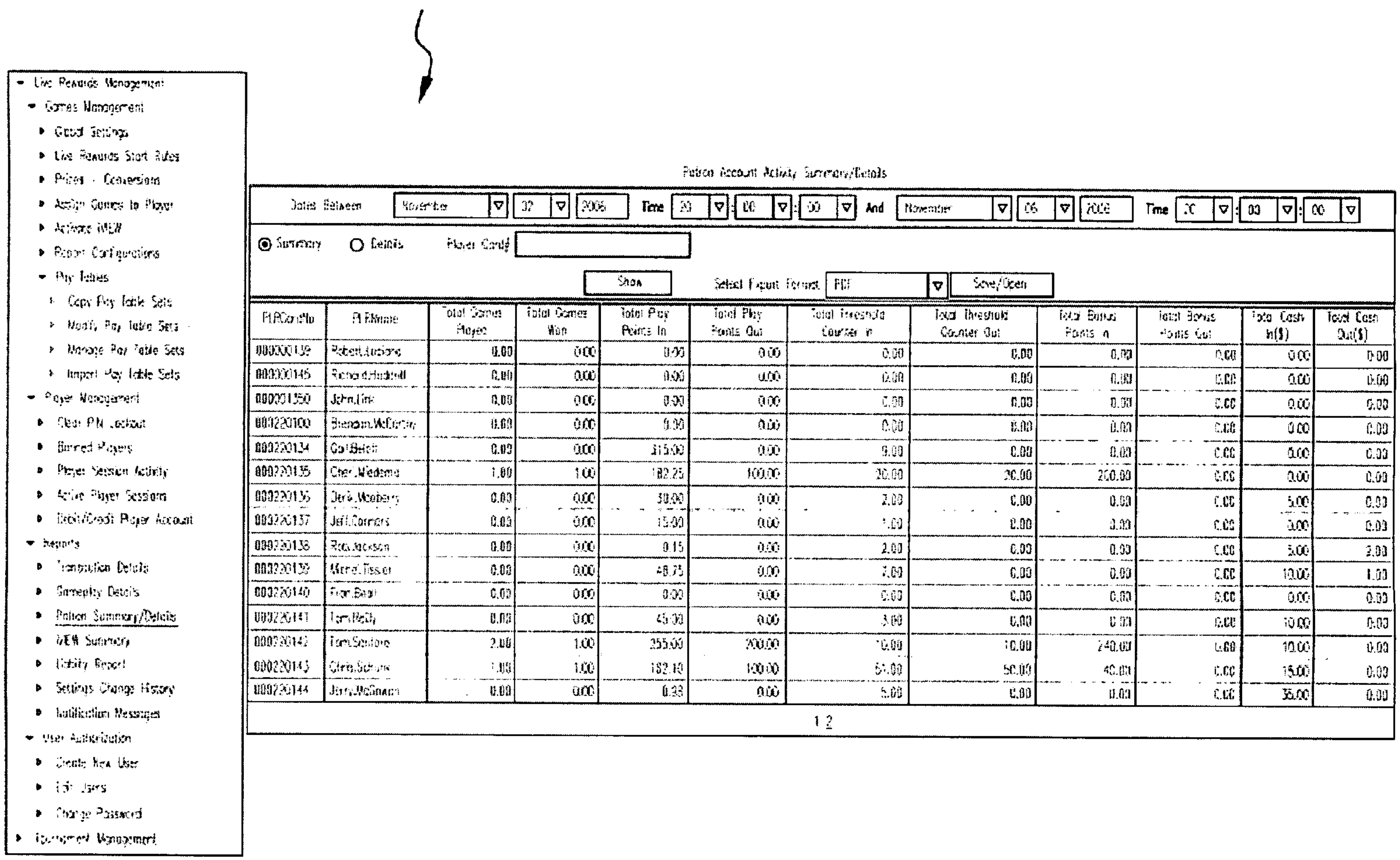

Live Rewards Management
Games Management
Global Settings
Live Rewards Start Rules
Prizes - Conversions
Assign Games to Player
Activate WEW
Report Configurations
Pay Tables
Copy Pay Table Sets
Modify Pay Table Sets
Manage Pay Table Sets
Import Pay Table Sets
Player Management
Clear PIN Lockout
Banned Players
Player Session Activity
Active Player Sessions
Debit/Credit Player Account
Reports
Transaction Details
Gameplay Details
Patron Summary/Details
WEW Summary
Liability Report
Settings Change History
Notification Messages
User Authorization
Create New User
Edit Users
Change Password
Tournament Management
Patron Account Activity Summary/Details
Dates Between
Time
And
Summary
Details
Player Card#
Show
Select Export Format
Save/Open
PlRCardNo
PlRName
Total Games Played
Total Games Won
Total Play Points In
Total Play Points Out
Total Threshold Counter In
Total Threshold Counter Out
Total Bonus Points In
Total Bonus Points Out
Total Cash In($)
Total Cash Out($)
1 2

FIG.54A

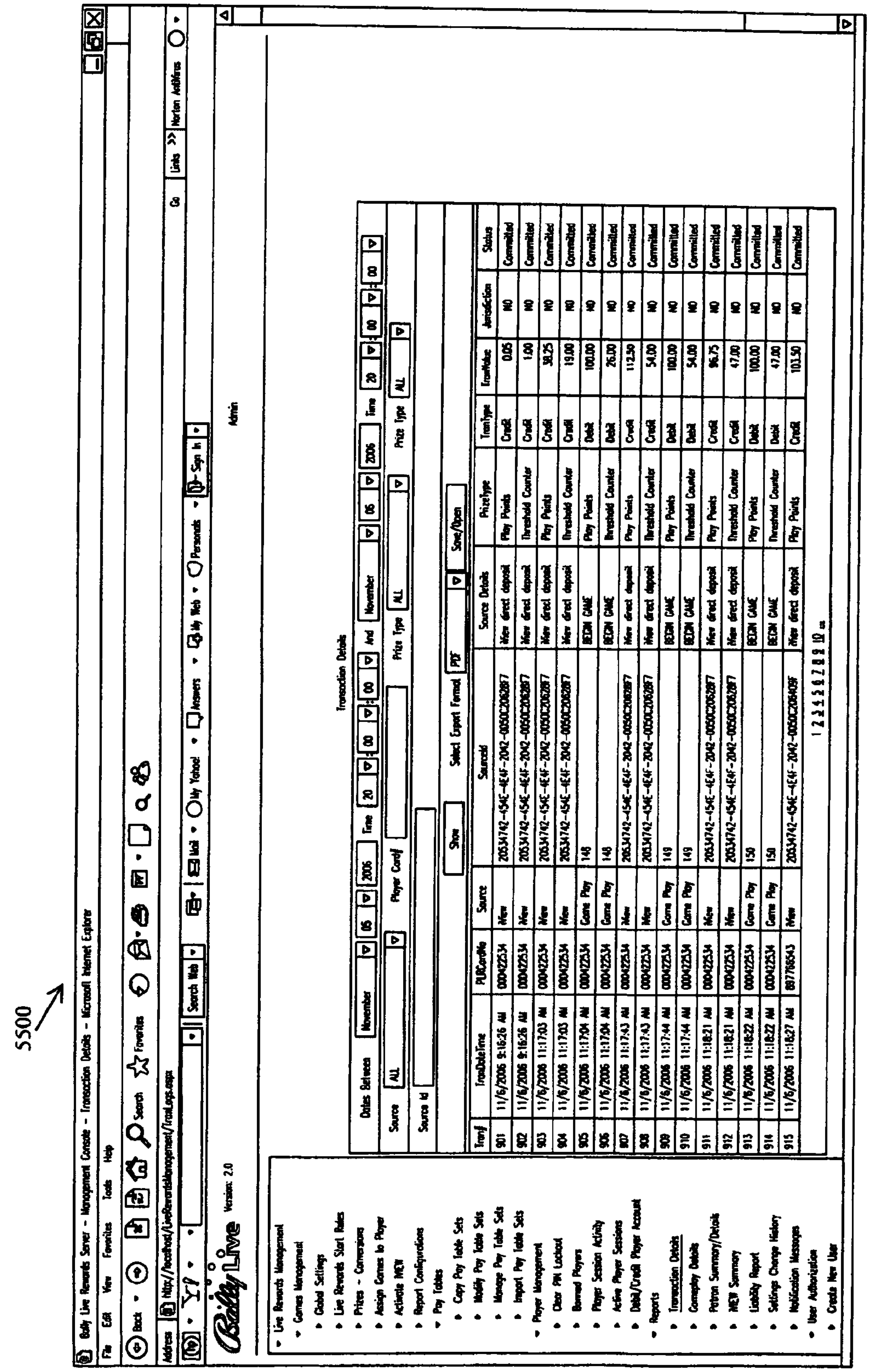


FIG.55

5502

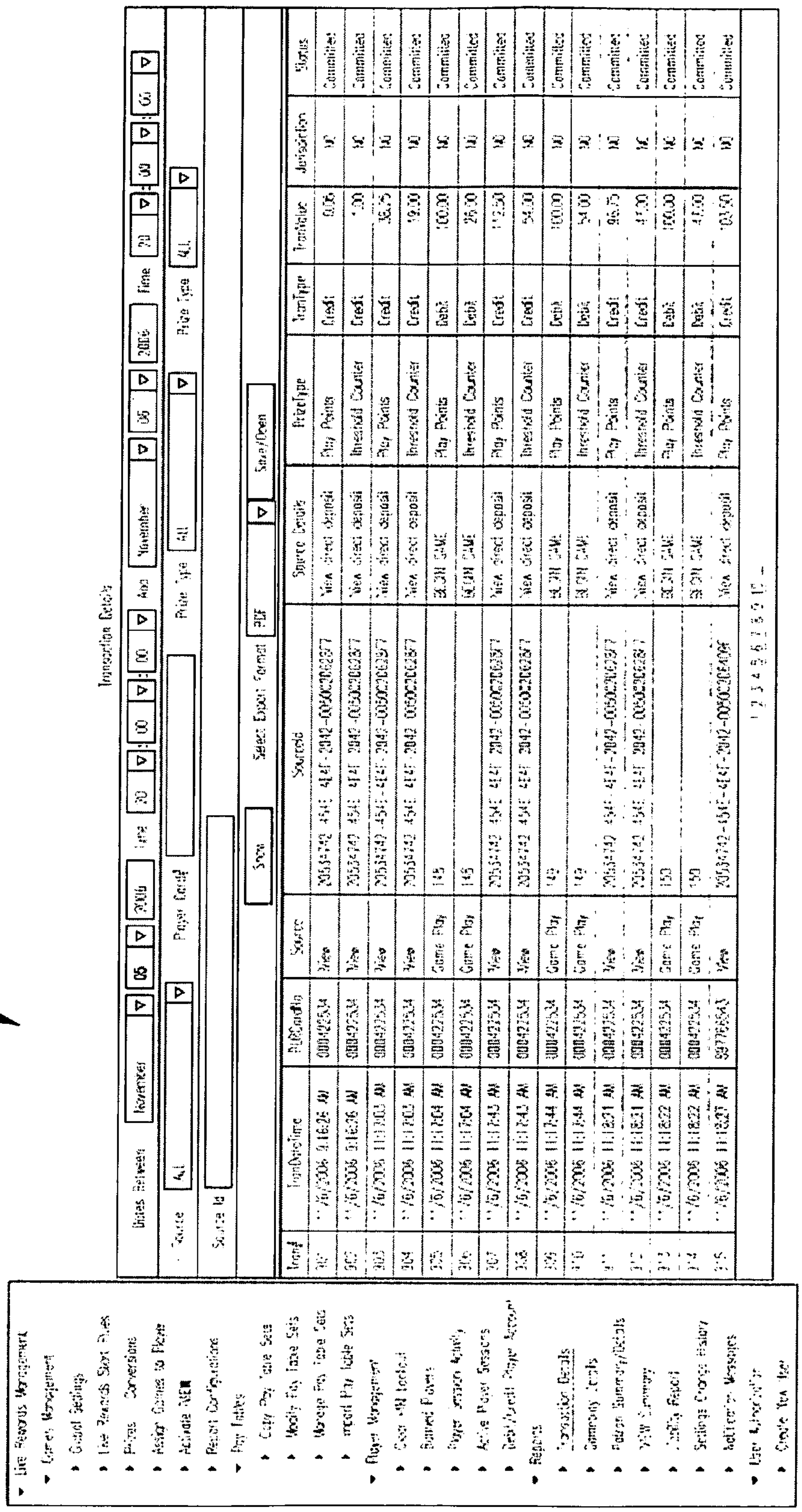

Transaction Details
Dates Between
Source
Player Card#
Prize Type
Source Id
Show
Select Export Format
PDF
Save/Open
Transaction Details
Reports

FIG.55A

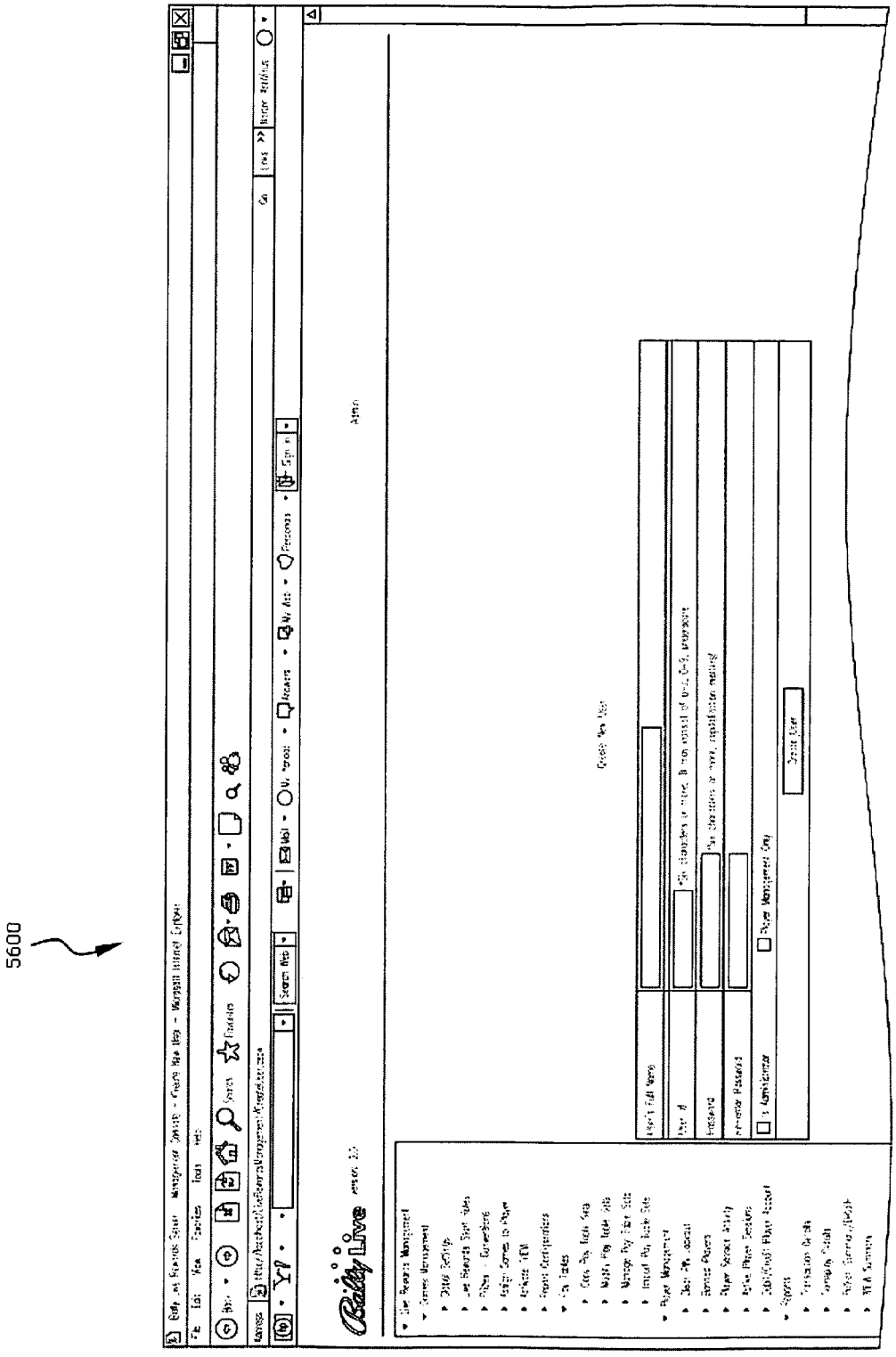


FIG.56

5602
Create New User
User's Full Name
User Id
*Six characters or more; ID may consist of a-z, 0-9, underscore
Password
*Six characters or more; capitalization matters.
Re-enter Password
Is Administrator
Player Management Only
Create User

FIG.56A

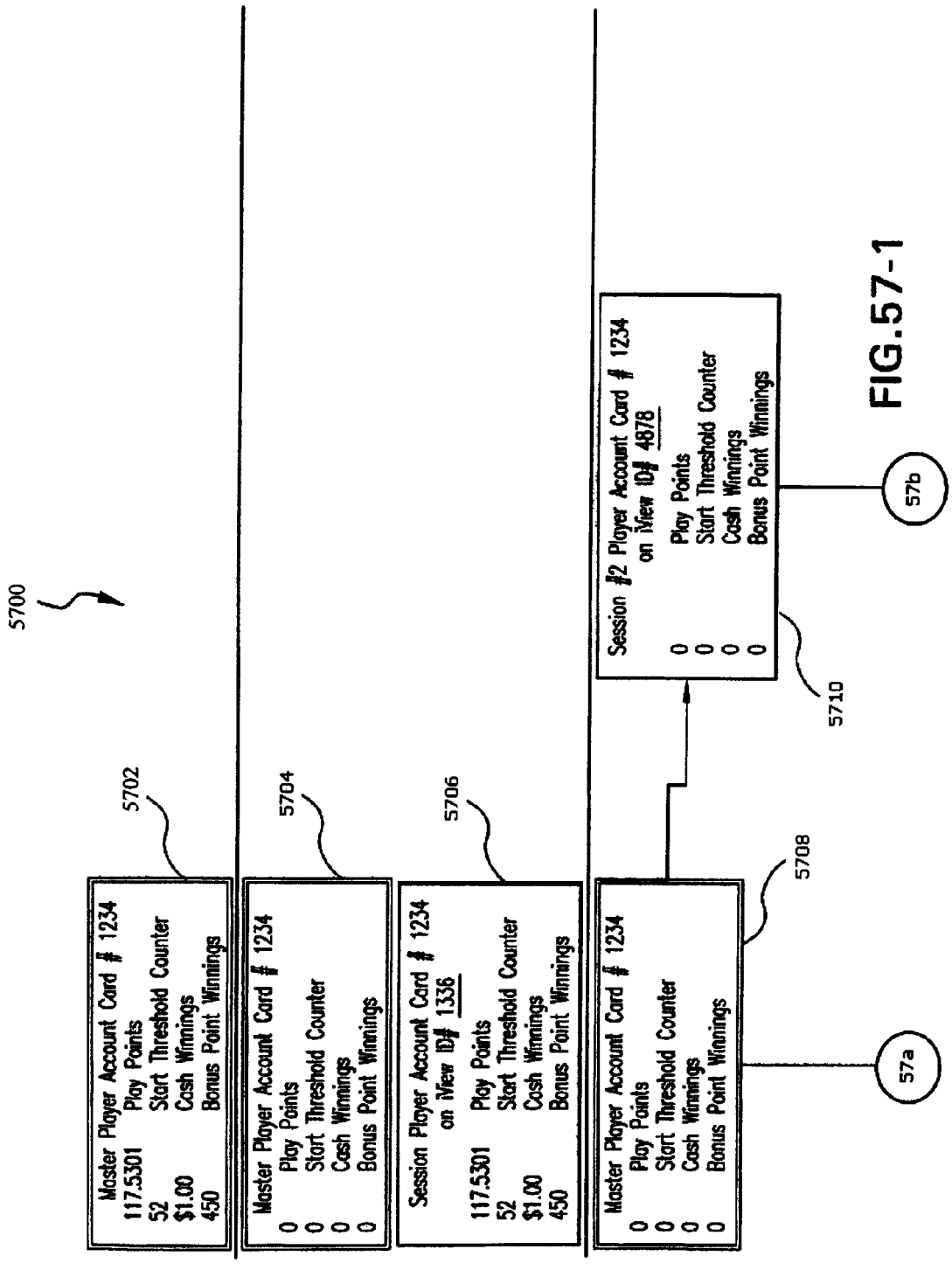

5700
Master Player Account Card # 1234
117.5301 Play Points
52 Start Threshold Counter
$1.00 Cash Winnings
450 Bonus Point Winnings
5702
Master Player Account Card # 1234
0 Play Points
0 Start Threshold Counter
0 Cash Winnings
0 Bonus Point Winnings
5704
Session Player Account Card # 1234
on View ID# 1336
117.5301 Play Points
52 Start Threshold Counter
$1.00 Cash Winnings
450 Bonus Point Winnings
5706
Master Player Account Card # 1234
0 Play Points
0 Start Threshold Counter
0 Cash Winnings
0 Bonus Point Winnings
5708
Session #2 Player Account Card # 1234
on View ID# 4878
0 Play Points
0 Start Threshold Counter
0 Cash Winnings
0 Bonus Point Winnings
5710
57a
57b

FIG.57-1

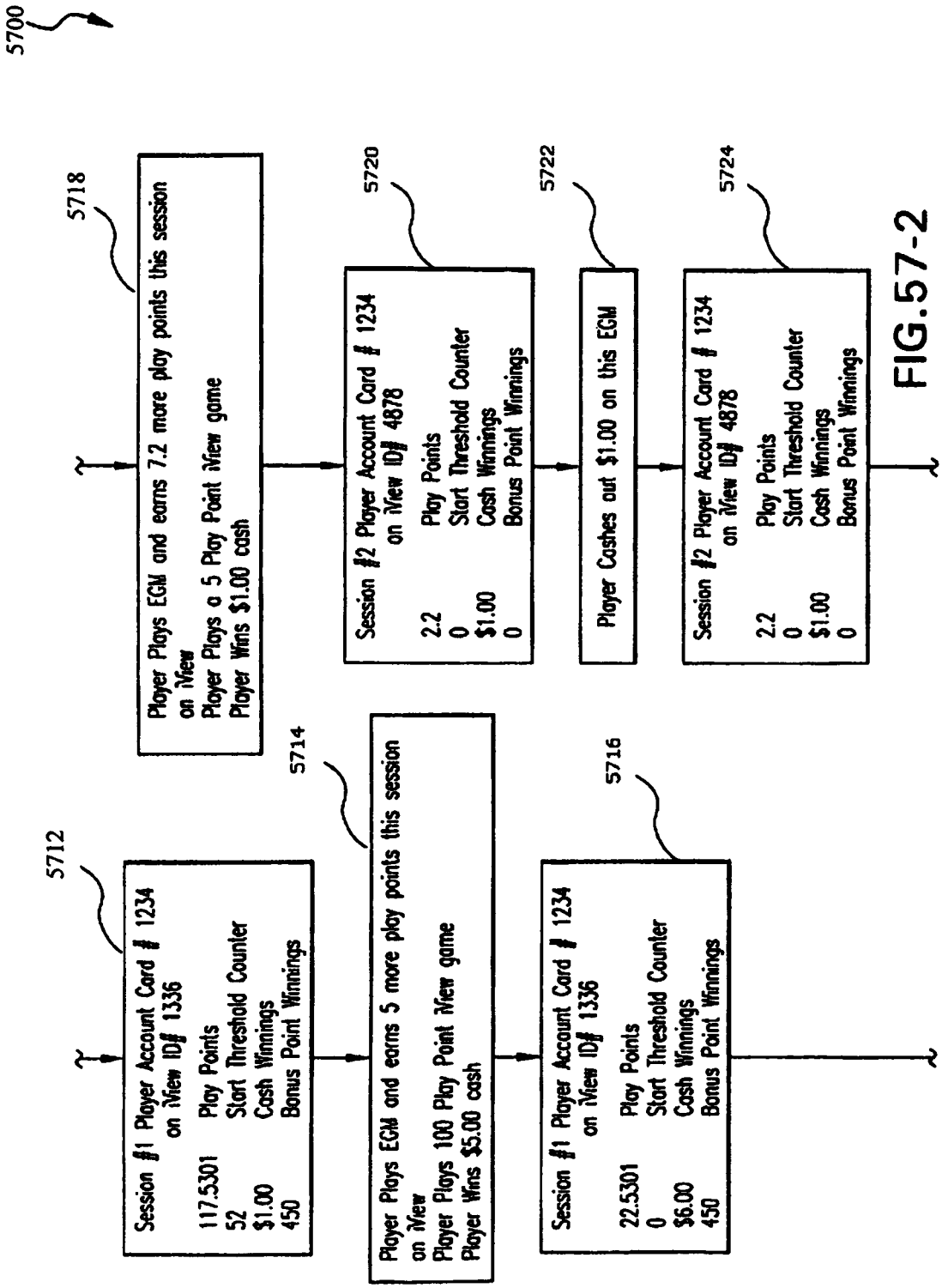

5700
5712
Session #1 Player Account Card # 1234
on iView ID# 1336
117.5301 Play Points
52 Start Threshold Counter
$1.00 Cash Winnings
450 Bonus Point Winnings
5714
Player Plays EGM and earns 5 more play points this session
on iView
Player Plays 100 Play Point iView game
Player Wins $5.00 cash
5716
Session #1 Player Account Card # 1234
on iView ID# 1336
22.5301 Play Points
0 Start Threshold Counter
$6.00 Cash Winnings
450 Bonus Point Winnings
5718
Player Plays EGM and earns 7.2 more play points this session
on iView
Player Plays a 5 Play Point iView game
Player Wins $1.00 cash
5720
Session #2 Player Account Card # 1234
on iView ID# 4878
2.2 Play Points
0 Start Threshold Counter
$1.00 Cash Winnings
0 Bonus Point Winnings
5722
Player Cashes out $1.00 on this EGM
5724
Session #2 Player Account Card # 1234
on iView ID# 4878
2.2 Play Points
0 Start Threshold Counter
$1.00 Cash Winnings
0 Bonus Point Winnings

FIG.57-2

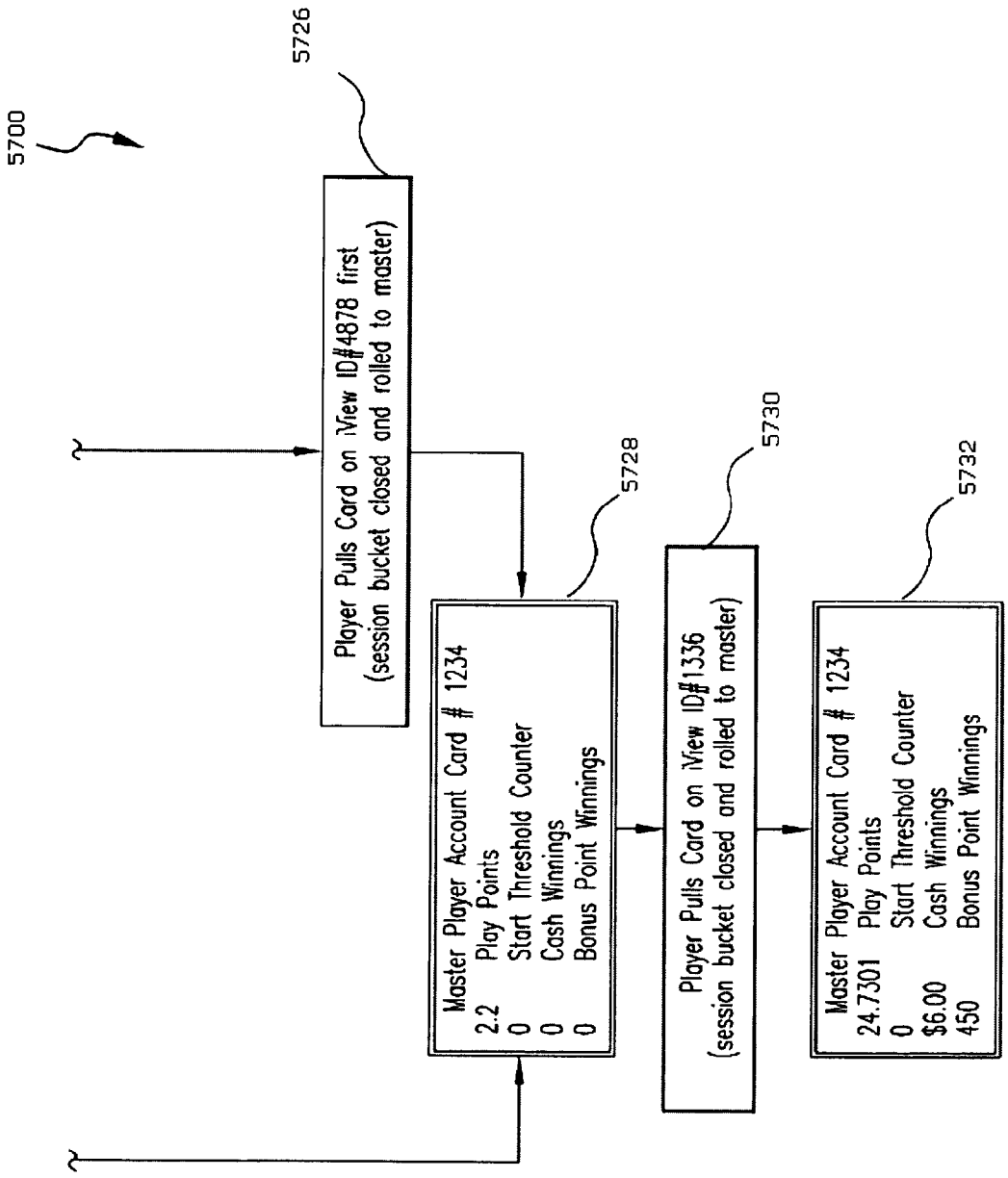

5700
5726
Player Pulls Card on View ID#4878 first
(session bucket closed and rolled to master)
5728
Master Player Account Card # 1234
2.2 Play Points
0 Start Threshold Counter
0 Cash Winnings
0 Bonus Point Winnings
5730
Player Pulls Card on View ID#1336
(session bucket closed and rolled to master)
5732
Master Player Account Card # 1234
24.7301 Play Points
0 Start Threshold Counter
$6.00 Cash Winnings
450 Bonus Point Winnings

FIG.57-3

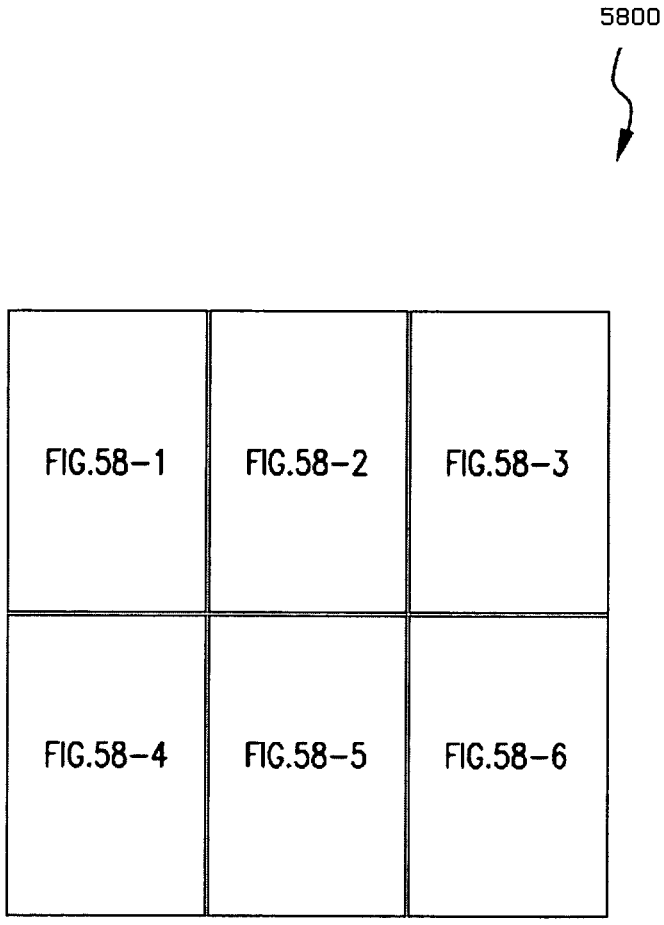


FIG.58

58-1

	Live Rewards Session Accounts
STEP#	Event
	Starting Values
1	Player #123 inserts 1st of his/her cards or logs in
2	Create Session(iVIEWID#176,Player#123) message sent to server
3	Player Wagers $20 over 80 base games and earns 5 play points and 80 STC's
4	DEPOSIT(5PP,80STC) message sent from iVIEW to Session account
5	BEGIN_GAME(10PP) message to Server from iVIEW
6	Server DEBITS session account by cost to play (10PP and All STC)
7	iView Begins a 10 Play Point Game and all STC's
8	Player Wins $10.00 on iView Poker game
9	END_GAME_DEPOSIT($10) message sent from iVIEW to Session account
10	Player Wagers $4 over 16 base games and earns 1 play point and 16 STC's
11	Player removes player card or logs out
12	CloseSession(iVIEWID#176,Player#123) message sent to server
16	Player #123 re-inserts card or logs into the same iVIEW
17	CreateSession(iVIEWID#176,Player#123) message sent ot server
18	Player Wagers $100 over 110 games and earns 25 play points and 110STC

FIG.58-1

58-2

SERVER Sub-ACCOUNT MEW ID 176					
PlayPoints (PP)	StartThrCtr (STC)	Live Reward Game Wins Cash	Play Points Earned since last deposit (PP)	PP Display Value includes PP on LRS	StartThrCtr Earned since last deposit (STC)
Session #1 Opened					
10	50	$0	0	10	0
10	50	$0	5	15	80
15	130	$0	0	15	0
15	130	$0	0	15	0
5	0	$0	0	5	0
5	0	$0	0	5	0
5	0	$0	0	5	0
5	0	$10	0	5	0
5	0	$10	1	6	16
6	16	$10	0	6	0
0	0	$0	0	0	0
Session #1 Closed					
Session #3 Opened					
0	0	$0	0	0	0
0	0	$0	25	25	110
0	0	$0	25	25	110
0	0	$0	25	25	110
0	0	$0	25	25	110
0	0	$0	25	25	110

FIG.58-2

58-3

iView Values			SERVER ACCOUNT for Player Card#123		
STC Display Value Includes STC on LRS	$$ Temp On iView	$$ Display Value	PlayPoints PP	StartThrCtr (STC)	Live Reward Game Wins Cash
			10	50	–
			10	50	–
50	$0	$0	–	–	–
130	$0	$0	–	–	–
130	$0	$0	–	–	–
130	$0	$0	–	–	–
0	$0	$0	–	–	–
0	$0	$0	–	–	–
0	$10	$10	–	–	–
0	$0	$10	–	–	–
16	$0	$10	–	–	–
16	$0	$10	–	–	–
0	$0	$0	6	16	$10
			6	16	$10
			–	–	–
			–	–	–
			–	–	–
			–	–	–
0	$0	$0	–	–	–
110	$0	$0	–	–	–
110	$0	$0	–	–	–
110	$0	$0	–	–	–
110	$0	$0	–	–	–
110	$0	$0	–	–	–

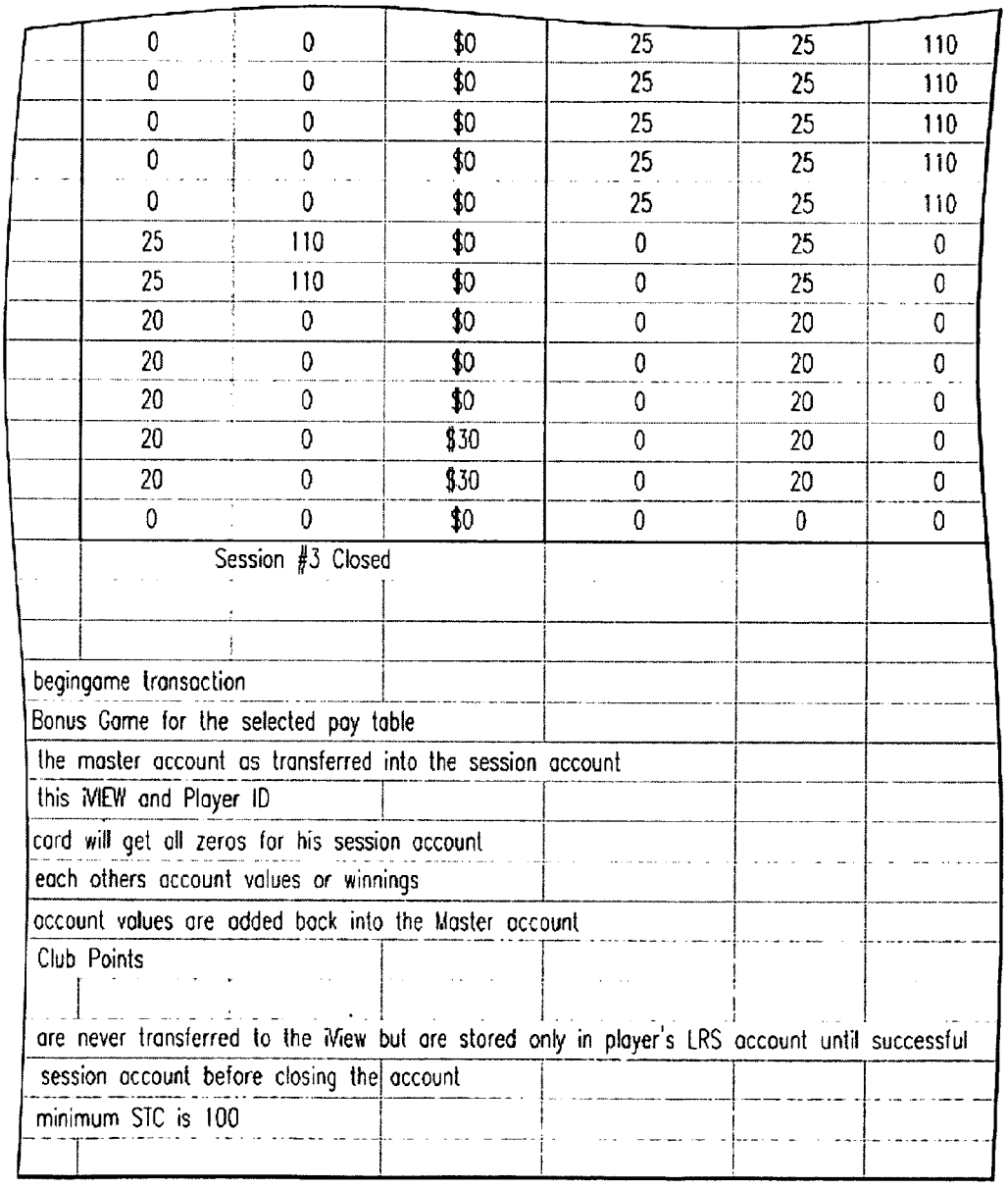
FIG.58-3

58-4

28	DEPOSIT(25PP,110STC) message sent from iVIEW to Session account
29	BEGIN_GAME(5PP) message to Server from iVIEW
30	Server DEBITS session account by cost to play (5PP and all STC)
31	iVIEW Begins a 5 Play Point Tournament Game
32	END_GAME sent from iVIEW to LRS
33	LRS determines player wins tournament ($30.00)
34	Player removes player card or logs out
35	CloseSession(iVIEWID#176,Player#123) message sent to server
Notes:	
1	At BEGIN_GAME:StartThrCtr–always set to zero in a session account after a successful
2	At BEGIN_GAME:Play Points–are deducted in session account by the cost to play this
3	Upon Player Tracking Card insertion a session account is created and all values from
4	The First card in reserves the Master Player account values into Session Account for
5	A Second Card inserted of the same card number immediately following the First
6	Each player plays against his/her own session account. This way they can't spend
7	When a player pulls his card or logs out the session is closed and the session
8	Any other player account values will be treated the same way. Including Player
9	There will be no sub–accounts if all cards removed
10	Note that is the case of the player playing an LRS tournament the cash winnings
11	When player removes their card all PP and STC are transferred to the player
12	For this example to play a game the minimum PP needed is 5 and the

FIG.58-4

58-5



	0	0	$0	25	25	110
	0	0	$0	25	25	110
	0	0	$0	25	25	110
	0	0	$0	25	25	110
	0	0	$0	25	25	110
	25	110	$0	0	25	0
	25	110	$0	0	25	0
	20	0	$0	0	20	0
	20	0	$0	0	20	0
	20	0	$0	0	20	0
	20	0	$30	0	20	0
	20	0	$30	0	20	0
	0	0	$0	0	0	0
	Session #3 Closed					
begingame transaction						
Bonus Game for the selected pay table						
the master account as transferred into the session account						
this iVIEW and Player ID						
card will get all zeros for his session account						
each others account values or winnings						
account values are added back into the Master account						
Club Points						
are never transferred to the iView but are stored only in player's LRS account until successful						
session account before closing the account						
minimum STC is 100						

FIG.58-5

58-6

110	$0	$0	–	–	–
110	$0	$0	–	–	–
110	$0	$0	–	–	–
110	$0	$0	–	–	–
110	$0	$0	10	–	$9
110	$0	$0	10	–	$9
110	$0	$0	10	–	$9
0	$0	$0	10	–	$9
0	$0	$0	10	–	$9
0	$0	$0	10	–	$9
0	$0	$30	10	–	$9
0	$0	$30	10	–	$9
0	$0	$0	30	–	$39
transfer to the base game					

FIG.58-6

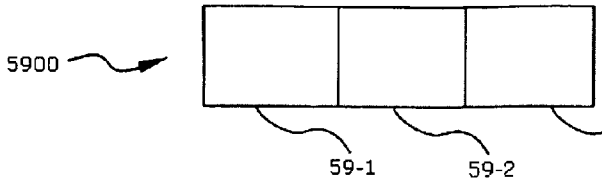


FIG. 59

59-1

STEP #	iView Values			
	Play Points Earned since last deposit (PP)	PP Dispaly Value Includes PP on LRS	StartThrCtr Earned since last deposit (STC)	STC Display Value Includes STC on LRS
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
	0	6	0	16
	10	16	84	100
	10	16	84	100
16	10	16	84	100
17	10	16	84	100
18	10	16	84	100
	0	16	0	100
	0	16	0	100
	0	11	0	0
	0	11	0	0
	0	11	0	0
	0	11	0	0
	0	11	0	0
	0	11	0	0
	0	0	0	0
28				
29				
30				
31				
32				
33				
34				
35				

FIG.59-1

59-2

		SERVER Sub-ACCOUNT iView ID 473			
$$ TEMP On iView	$$ Display Value	PlayPoints (PP)	StartThrCtr (STC)	Live Reward Game Wins Cash	STEP #
		Session #2 Opened			13
$0	$10	6	16	$10	14
$0	$10	6	16	$10	15
$0	$10	6	16	$10	
$0	$10	6	16	$10	
$0	$10	6	16	$10	
$0	$10	6	16	$10	
$0	$10	16	100	$10	19
$0	$10	16	100	$10	20
$0	$10	11	0	$10	21
$0	$10	11	0	$10	22
$0	$10	11	0	$10	23
$0	$10	11	0	$10	24
$0	$9	11	0	$9	25
$0	$9	11	0	$9	26
$0	$0	0	0	$0	27

FIG.59-2

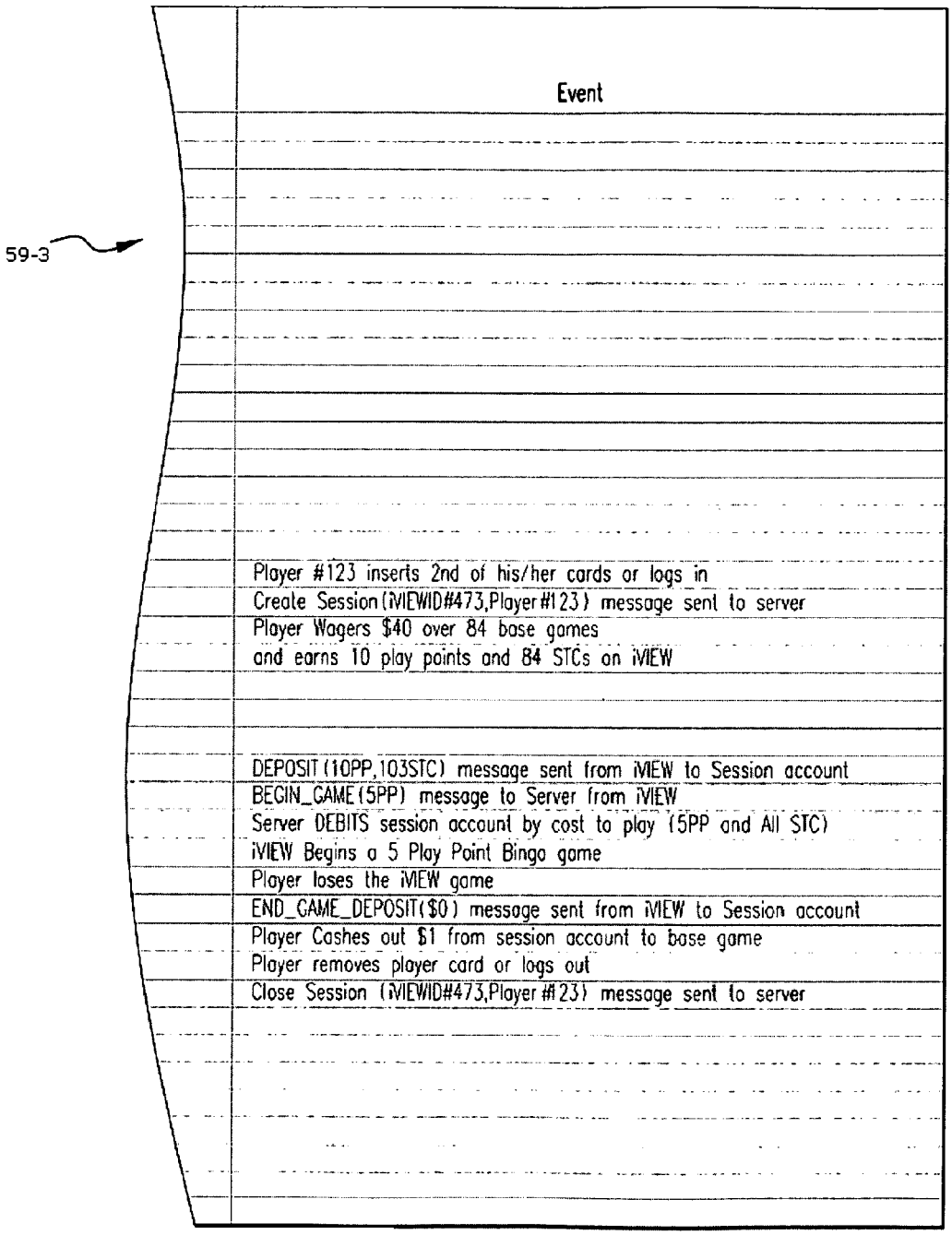

59-3
Event
Player #123 inserts 2nd of his/her cards or logs in
Create Session (iVIEWID#473,Player #123) message sent to server
Player Wagers $40 over 84 base games
and earns 10 play points and 84 STCs on iVIEW
DEPOSIT (10PP,103STC) message sent from iVIEW to Session account
BEGIN_GAME(5PP) message to Server from iVIEW
Server DEBITS session account by cost to play (5PP and All STC)
iVIEW Begins a 5 Play Point Bingo game
Player loses the iVIEW game
END_GAME_DEPOSIT($0) message sent from iVIEW to Session account
Player Cashes out $1 from session account to base game
Player removes player card or logs out
Close Session (iVIEWID#473,Player #123) message sent to server

FIG.59-3

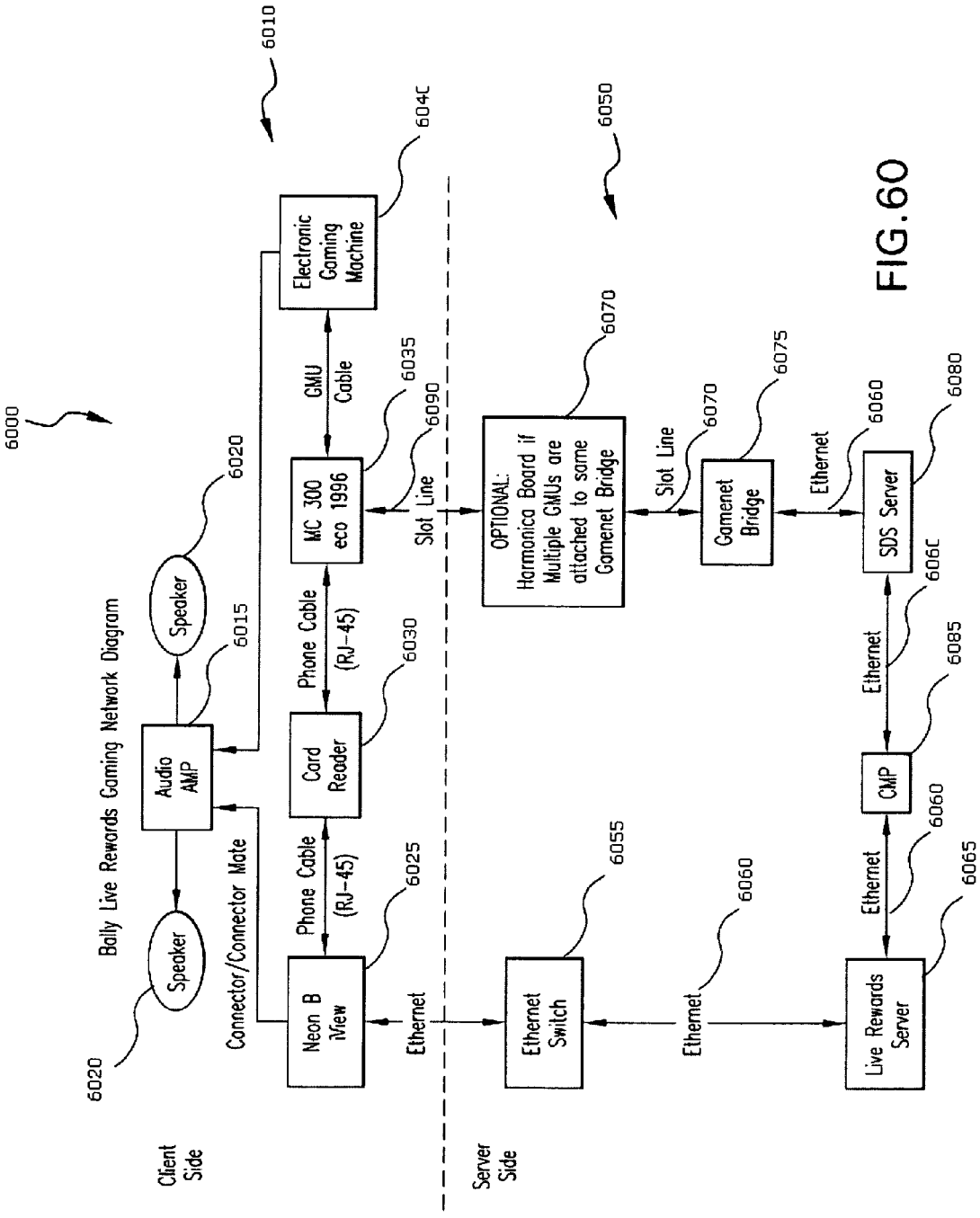

6000
Bally Live Rewards Gaming Network Diagram
6010
6020
Speaker
6015
Audio AMP
6020
Speaker
Connector/Connector Mate
6025
Phone Cable (RJ-45)
Neon B iView
6030
Phone Cable (RJ-45)
Card Reader
6035
GMU Cable
MC 300 eco 1996
6040
Electronic Gaming Machine
6050
6055
Ethernet Switch
6060
Ethernet
6065
Live Rewards Server
6060
Ethernet
CMP
6060
Ethernet
6080
SDS Server
6070
Slot Line
6070
OPTIONAL: Harmonica Board if Multiple GMUs are attached to same Gamenet Bridge
6075
Gamenet Bridge
6090
Slot Line
Ethernet
Ethernet
Client Side
Server Side

FIG. 60

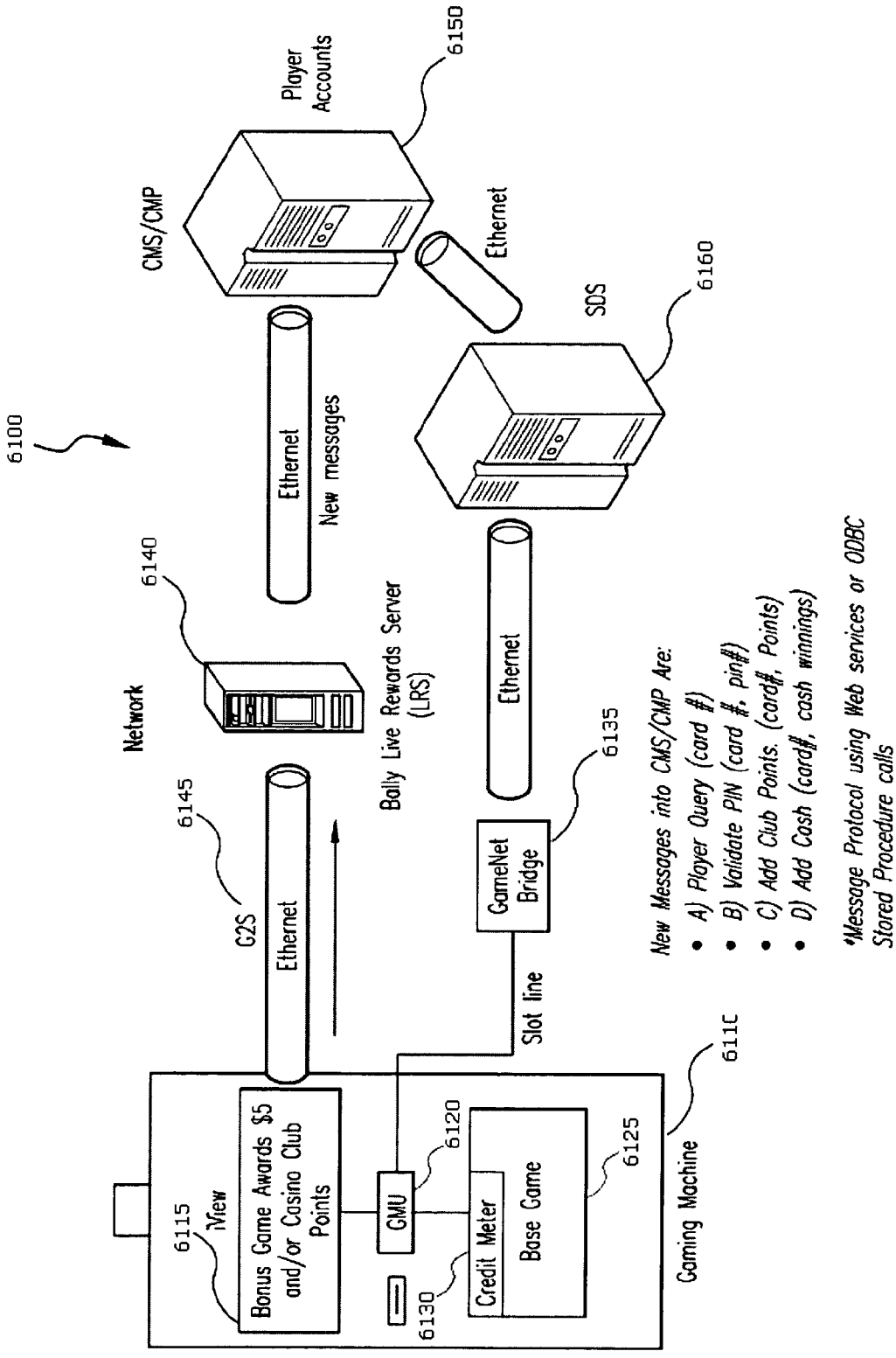

6100
CMS/CMP
Player Accounts
6150
Ethernet
SDS
6160
Ethernet
New messages
6140
Network
Bally Live Rewards Server (LRS)
Ethernet
6135
6145
G2S
Ethernet
GameNet Bridge
Slot line
6111C
6115
iView
Bonus Game Awards $5 and/or Casino Club Points
GMU
6120
Credit Meter
Base Game
6125
6130
Gaming Machine
New Messages into CMS/CMP Are:
A) Player Query (card #)
B) Validate PIN (card #, pin#)
C) Add Club Points. (card#, Points)
D) Add Cash (card#, cash winnings)
*Message Protocol using Web services or ODBC Stored Procedure calls

FIG.61

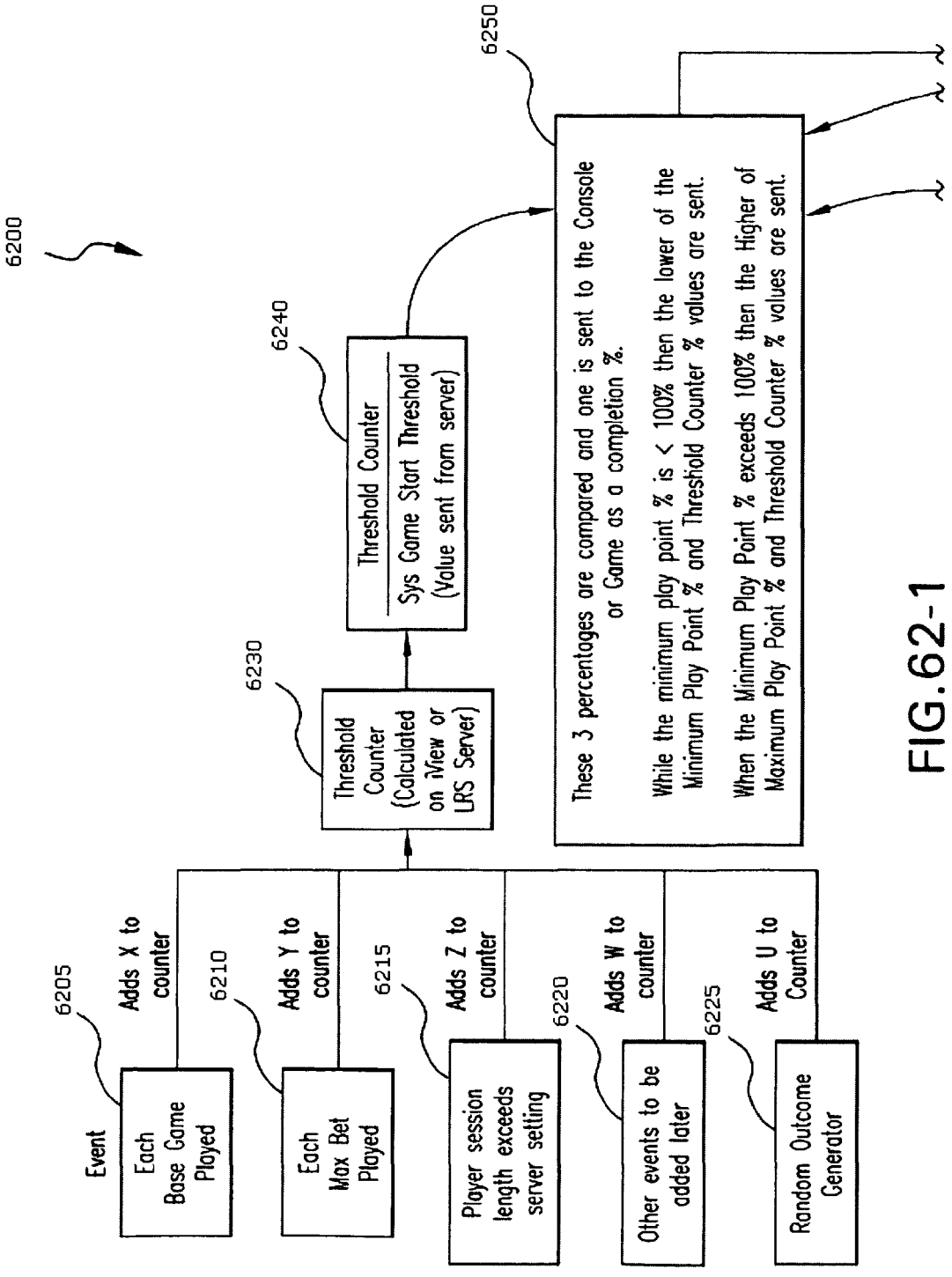

6200
6205
Event
Each Base Game Played
Adds X to counter
6210
Each Max Bet Played
Adds Y to counter
6215
Player session length exceeds server setting
Adds Z to counter
6220
Other events to be added later
Adds W to counter
6225
Random Outcome Generator
Adds U to Counter
6230
Threshold Counter (Calculated on View or LRS Server)
6240
Threshold Counter
Sys Game Start Threshold (Value sent from server)
6250
These 3 percentages are compared and one is sent to the Console or Game as a completion %.
While the minimum play point % is < 100% then the lower of the Minimum Play Point % and Threshold Counter % values are sent.
When the Minimum Play Point % exceeds 100% then the Higher of Maximum Play Point % and Threshold Counter % values are sent.

FIG.62-1

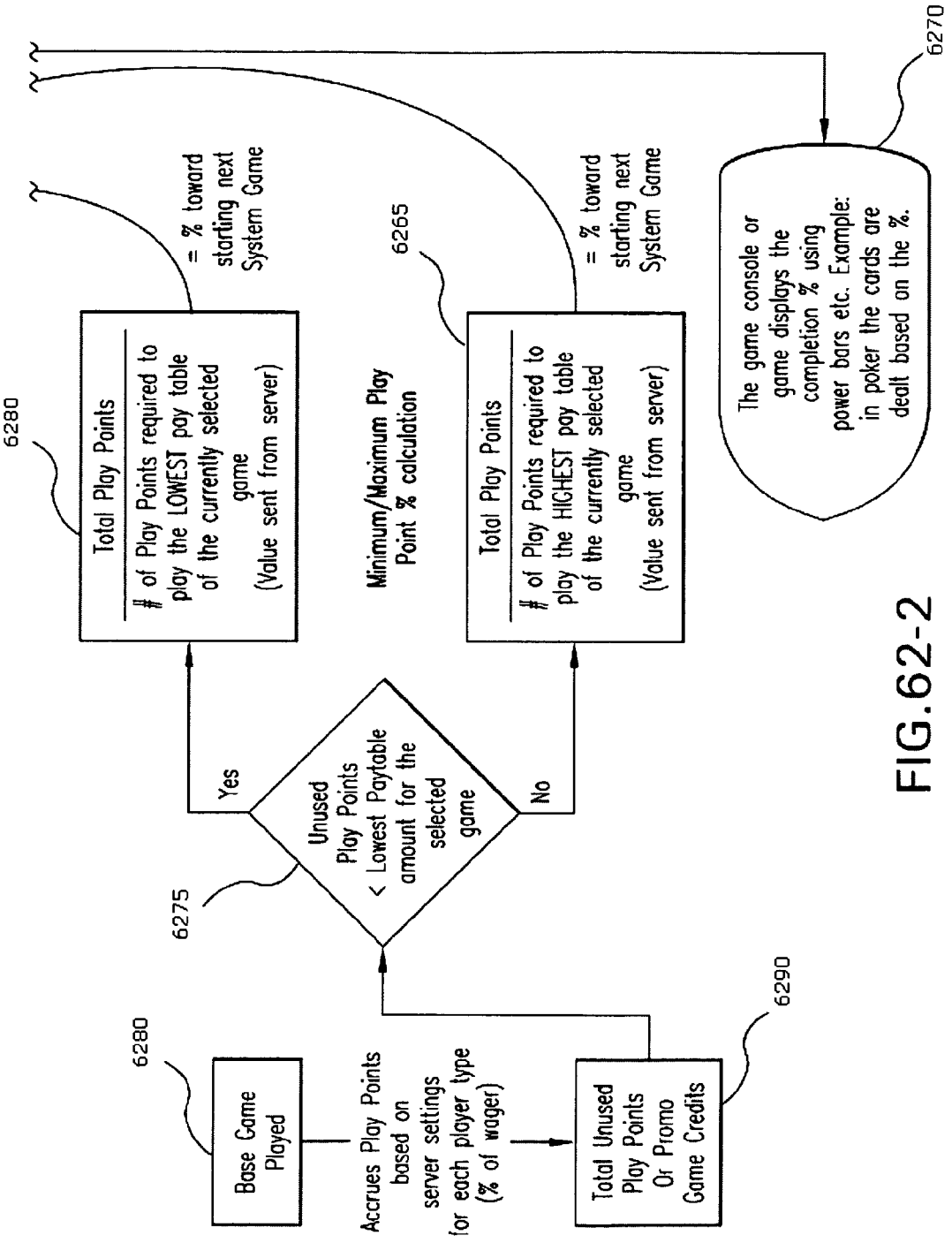

6280
Base Game Played
Accrues Play Points based on server settings for each player type (% of wager)
6290
Total Unused Play Points Or Promo Game Credits
6275
Unused Play Points < Lowest Paytable amount for the selected game
Yes
No
Total Play Points
# of Play Points required to play the LOWEST pay table of the currently selected game
(Value sent from server)
= % toward starting next System Game
Minimum/Maximum Play Point % calculation
6265
Total Play Points
# of Play Points required to play the HIGHEST pay table of the currently selected game
(Value sent from server)
= % toward starting next System Game
6270
The game console or game displays the completion % using power bars etc. Example: in poker the cards are dealt based on the %.

FIG.62-2

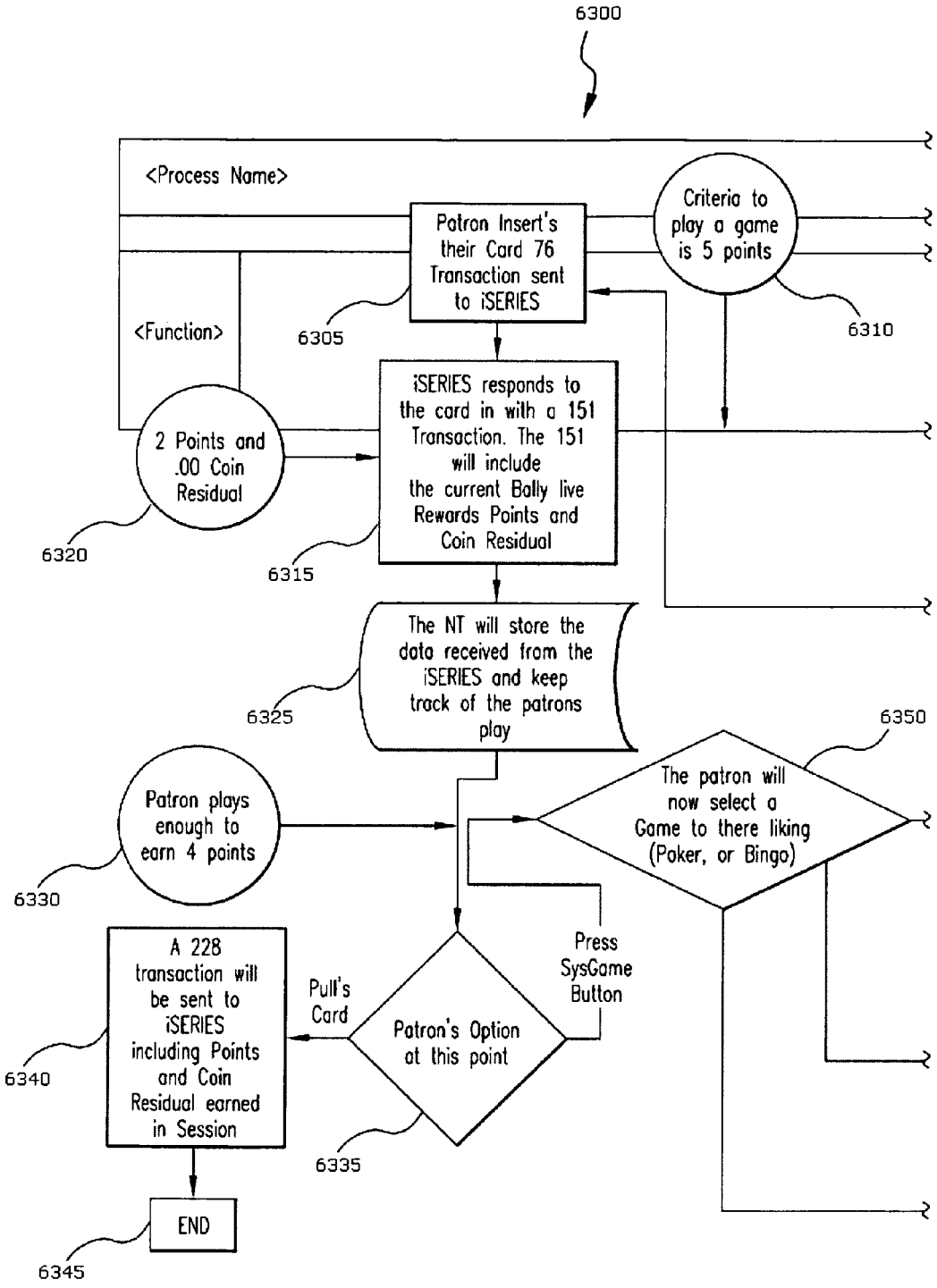

6300
<Process Name>
Patron Insert's their Card 76 Transaction sent to iSERIES
Criteria to play a game is 5 points
<Function>
6305
6310
2 Points and .00 Coin Residual
iSERIES responds to the card in with a 151 Transaction. The 151 will include the current Bally live Rewards Points and Coin Residual
6320
6315
The NT will store the data received from the iSERIES and keep track of the patrons play
6325
6350
Patron plays enough to earn 4 points
The patron will now select a Game to there liking (Poker, or Bingo)
6330
Press SysGame Button
Pull's Card
A 228 transaction will be sent to iSERIES including Points and Coin Residual earned in Session
Patron's Option at this point
6340
6335
END
6345

FIG.63-1

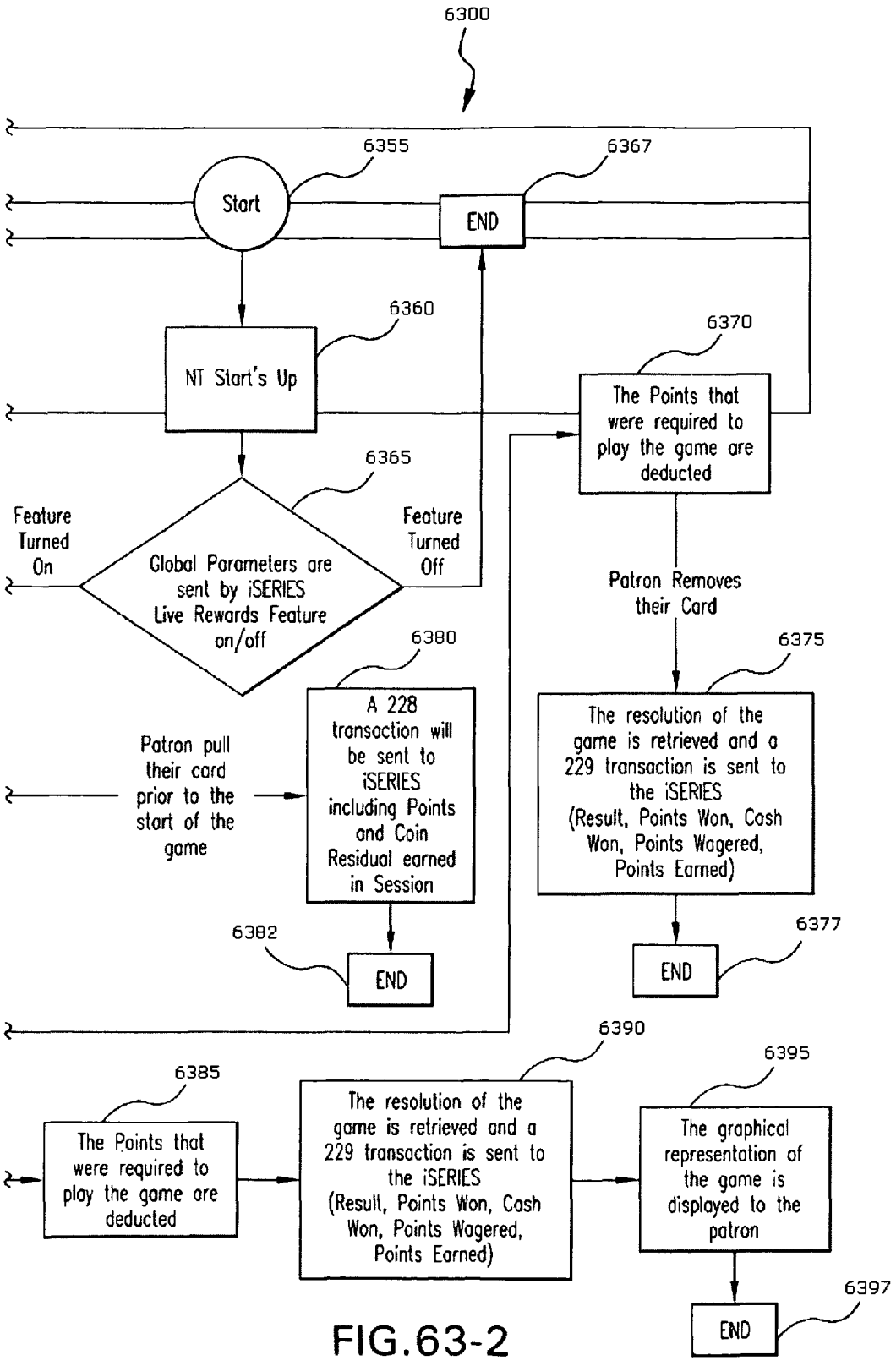

6300
6355
Start
6367
END
6360
NT Start's Up
6370
The Points that were required to play the game are deducted
6365
Feature Turned On
Global Parameters are sent by iSERIES Live Rewards Feature on/off
Feature Turned Off
Patron Removes their Card
6380
Patron pull their card prior to the start of the game
A 228 transaction will be sent to iSERIES including Points and Coin Residual earned in Session
6375
The resolution of the game is retrieved and a 229 transaction is sent to the iSERIES (Result, Points Won, Cash Won, Points Wagered, Points Earned)
6382
END
6377
END
6390
6385
The Points that were required to play the game are deducted
The resolution of the game is retrieved and a 229 transaction is sent to the iSERIES (Result, Points Won, Cash Won, Points Wagered, Points Earned)
6395
The graphical representation of the game is displayed to the patron
6397
END

FIG.63-2

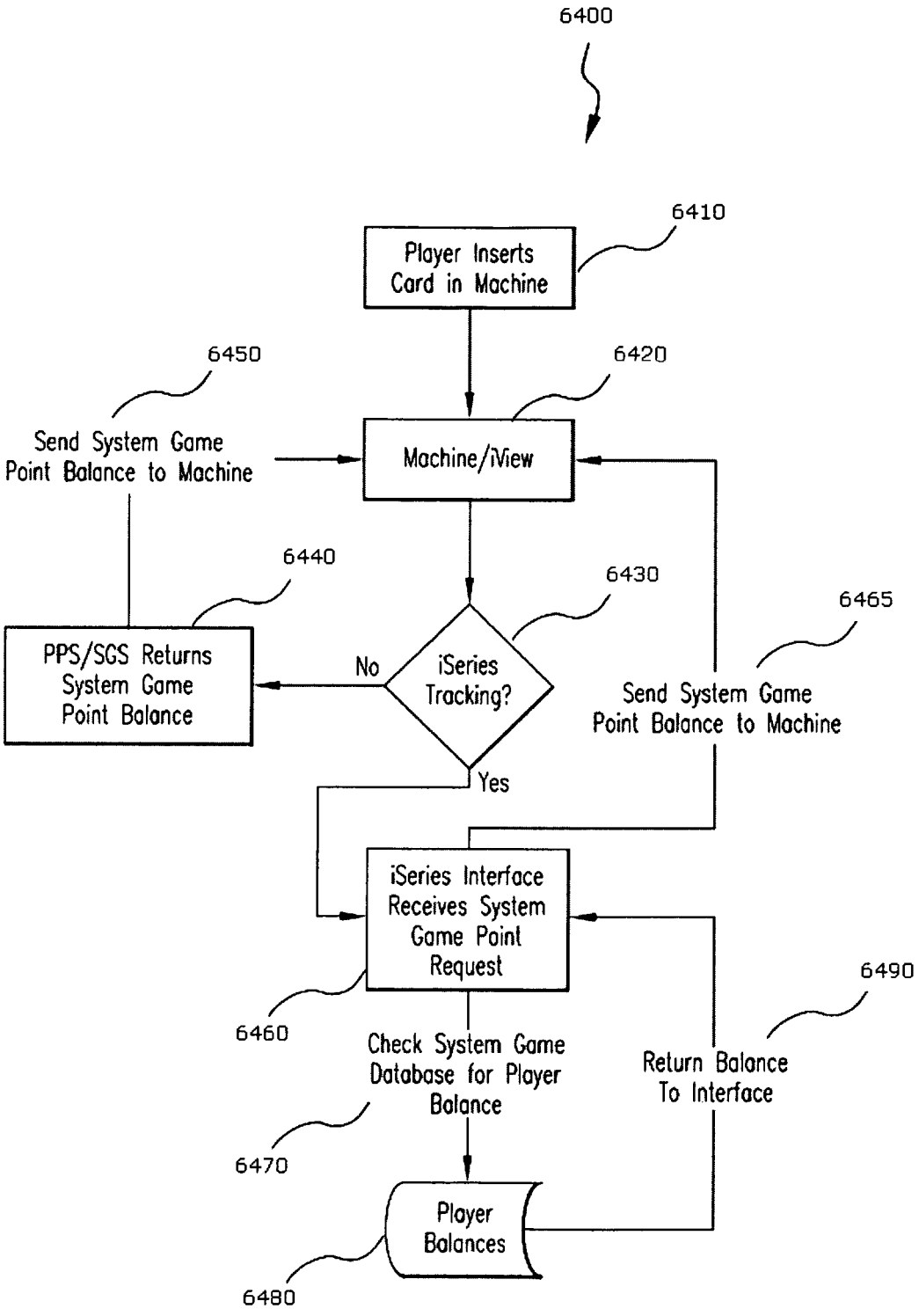

6400
6410
Player Inserts Card in Machine
6450
Send System Game Point Balance to Machine
6420
Machine/iView
6440
PPS/SGS Returns System Game Point Balance
6430
No
iSeries Tracking?
6465
Send System Game Point Balance to Machine
Yes
iSeries Interface Receives System Game Point Request
6460
6490
Check System Game Database for Player Balance
Return Balance To Interface
6470
Player Balances
6480

FIG.64

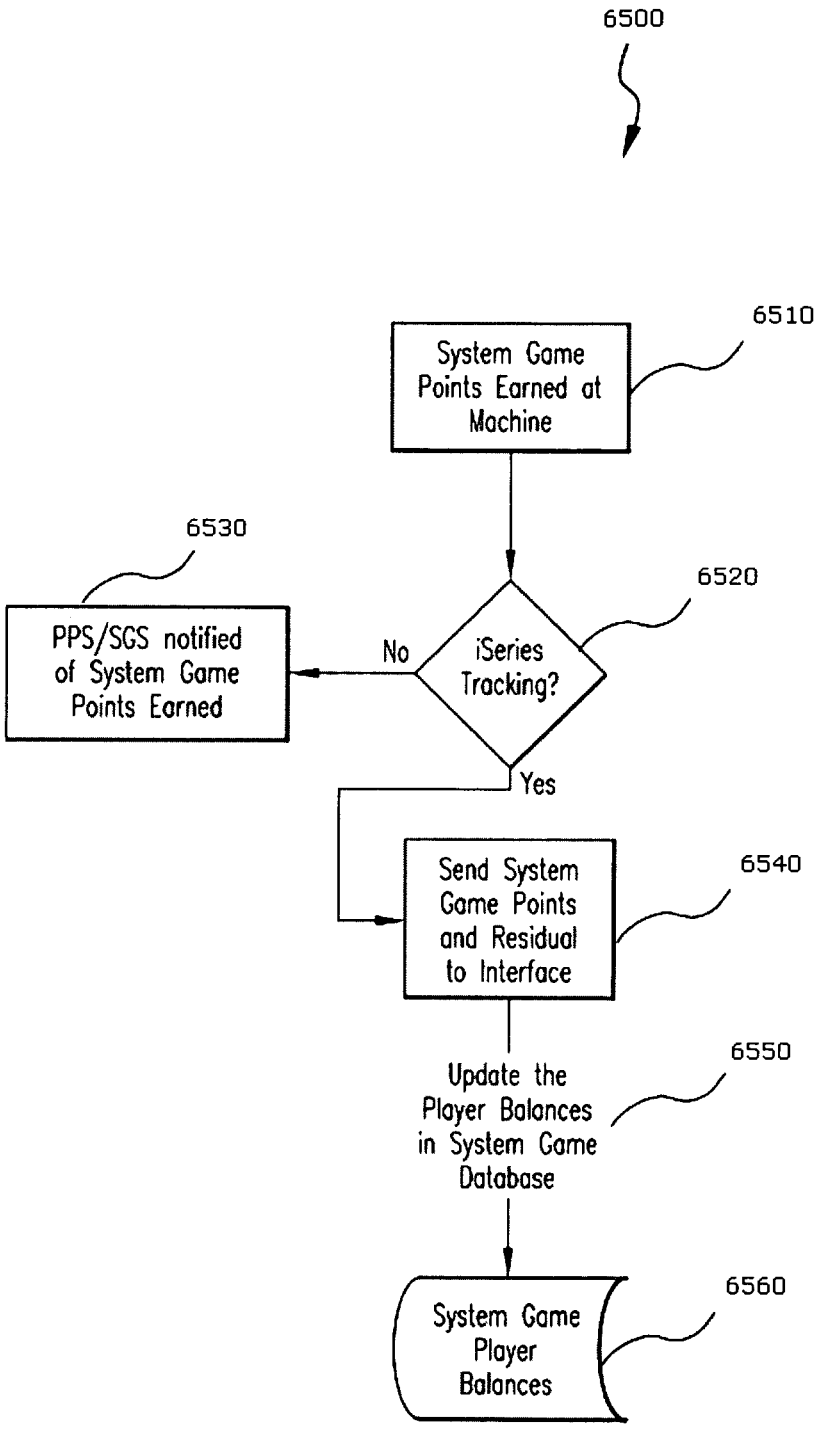

6500
System Game Points Earned at Machine
6510
iSeries Tracking?
6520
No
PPS/SGS notified of System Game Points Earned
6530
Yes
Send System Game Points and Residual to Interface
6540
Update the Player Balances in System Game Database
6550
System Game Player Balances
6560

FIG.65

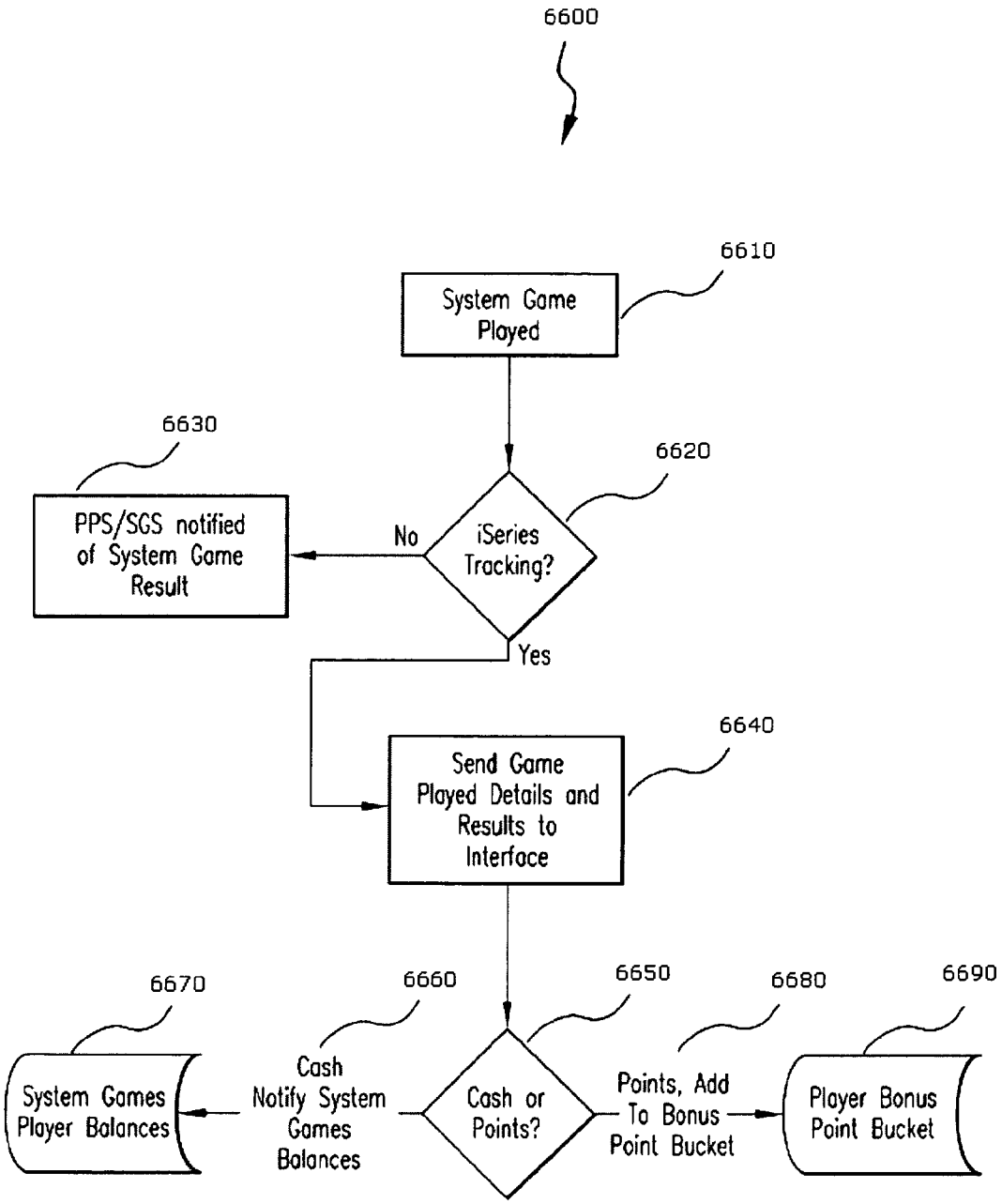

6600
6610
System Game Played
6620
iSeries Tracking?
No
6630
PPS/SGS notified of System Game Result
Yes
6640
Send Game Played Details and Results to Interface
6650
Cash or Points?
6660
Cash Notify System Games Balances
6670
System Games Player Balances
6680
Points, Add To Bonus Point Bucket
6690
Player Bonus Point Bucket

FIG.66

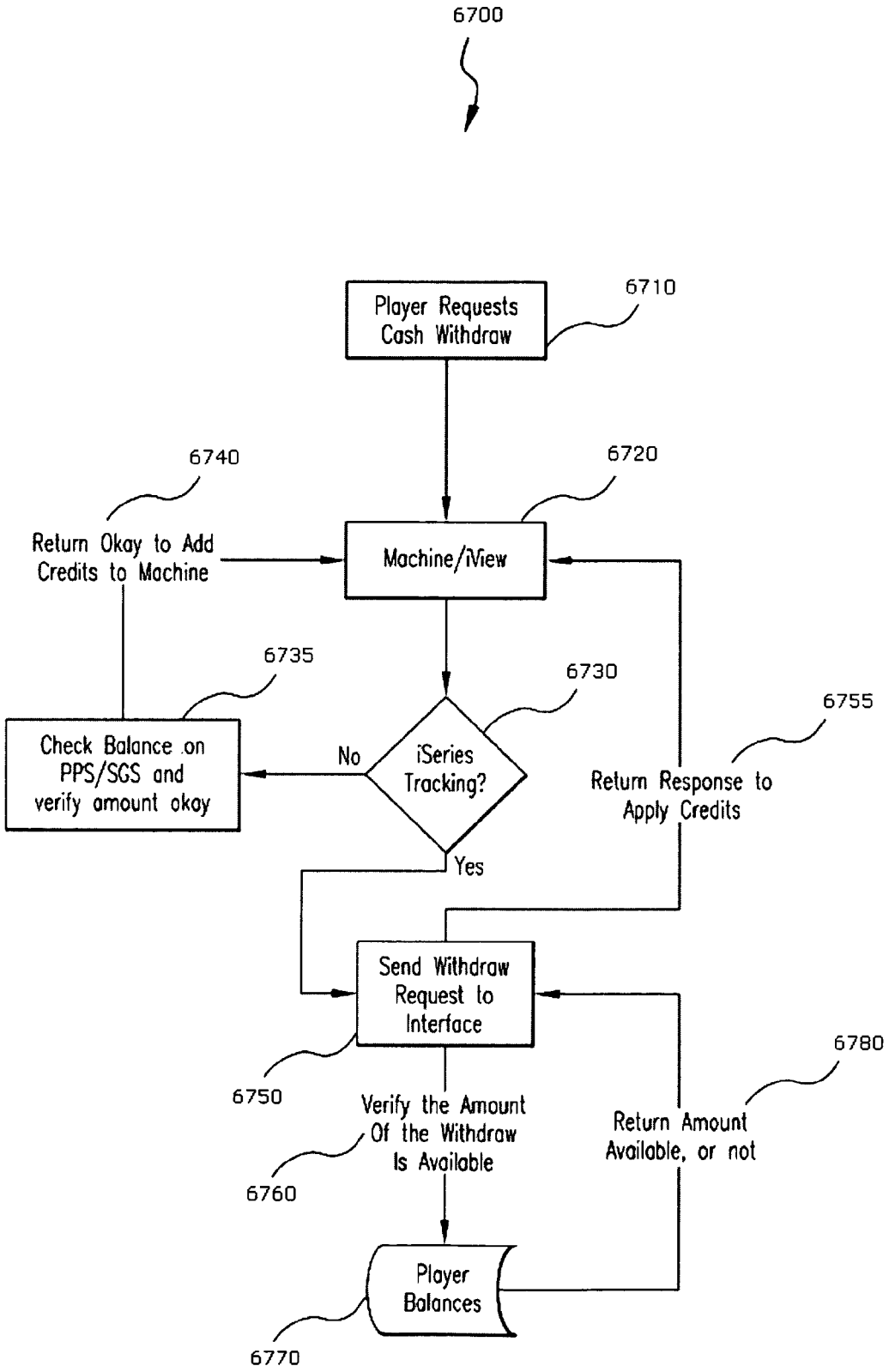

6700
Player Requests Cash Withdraw
6710
6740
Return Okay to Add Credits to Machine
6720
Machine/iView
6735
Check Balance on PPS/SGS and verify amount okay
6730
No
iSeries Tracking?
6755
Return Response to Apply Credits
Yes
Send Withdraw Request to Interface
6750
6780
Verify the Amount Of the Withdraw Is Available
6760
Return Amount Available, or not
Player Balances
6770

FIG.67

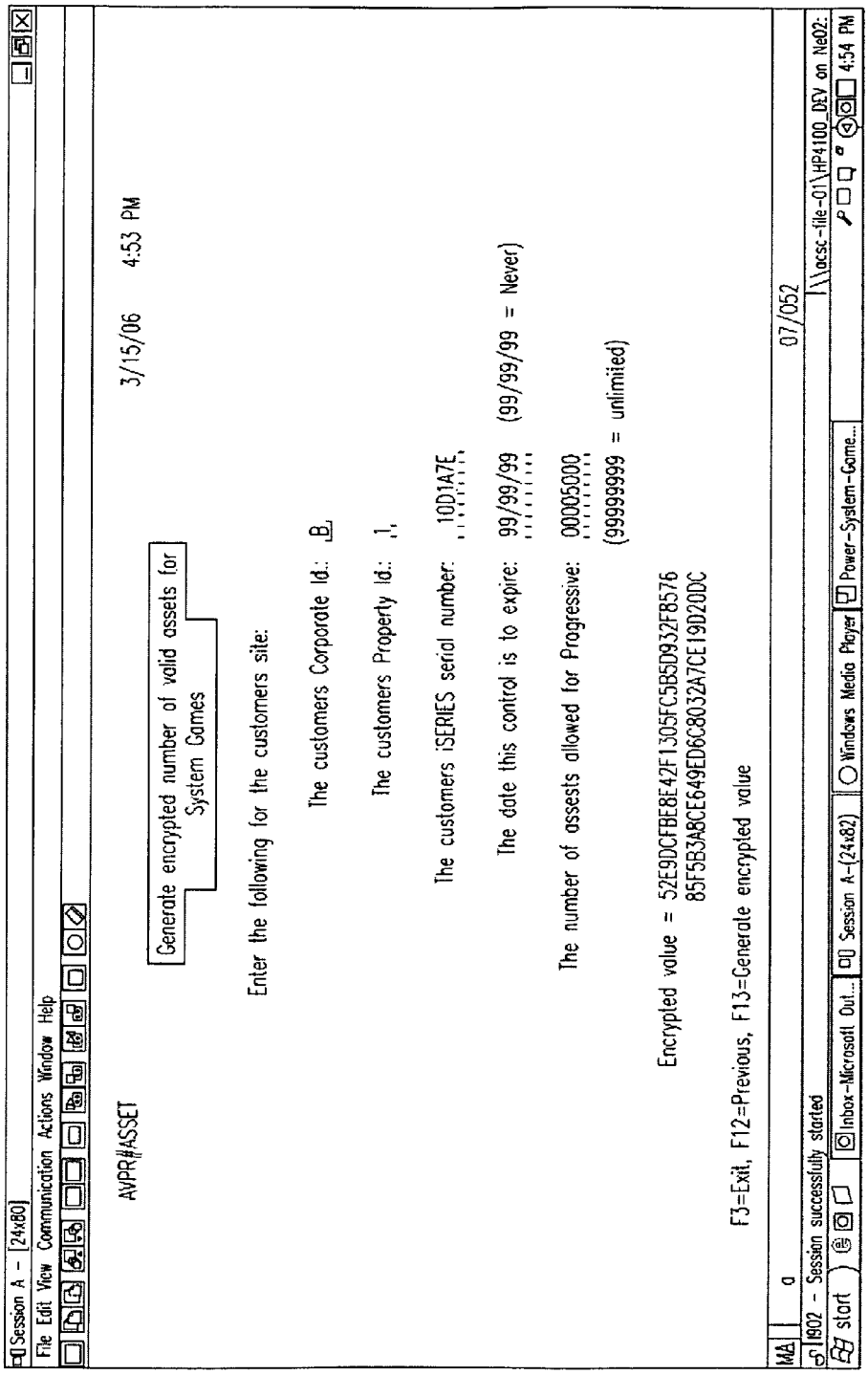

6800
Session A - [24x80]
File Edit View Communication Actions Window Help
AVPR#ASSET
3/15/06 4:53 PM
Generate encrypted number of valid assets for System Games
Enter the following for the customers site:
The customers Corporate Id: B
The customers Property Id: 1
The customers iSERIES serial number: 10D1A7E
The date this control is to expire: 99/99/99 (99/99/99 = Never)
The number of assests allowed for Progressive: 00005000
(99999999 = unlimited)
Encrypted value = 52E9DCFBEBE42F1305FC5B5D932FB576
85F5B3A8CE649ED6C8032A7CE19D20DC
F3=Exit, F12=Previous, F13=Generate encrypted value
MA q
07/052
1902 - Session successfully started
\\acsc-file-01\HP4100_DEV on Ne02:
start Inbox-Microsoft Out... Session A-[24x82] Windows Media Player Power-System-Game... 4:54 PM

FIG.68

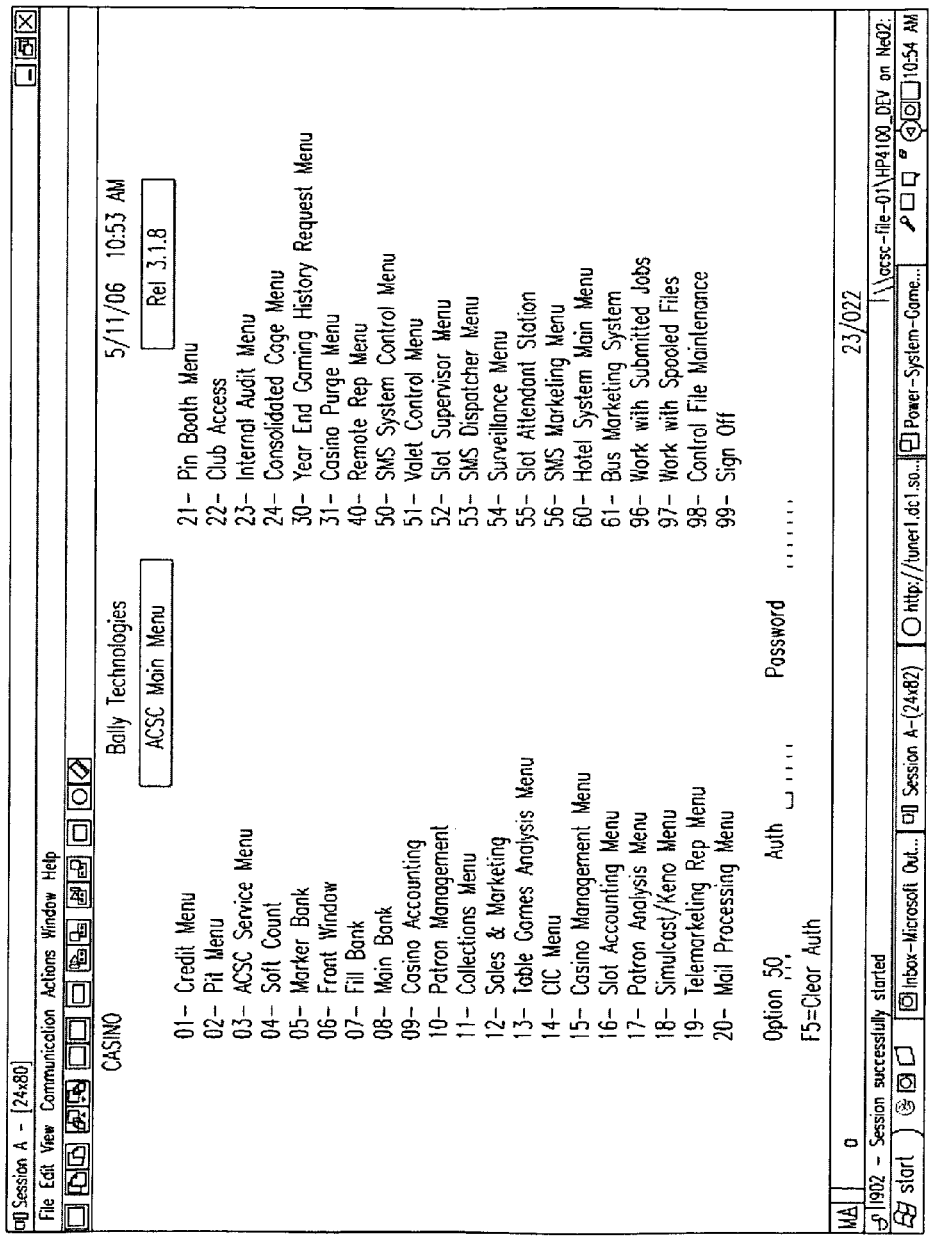

6900
Session A - [24x80]
File Edit View Communication Actions Window Help
CASINO
Bally Technologies
5/11/06 10:53 AM
ACSC Main Menu
Rel 3.1.8
01- Credit Menu
02- Pit Menu
03- ACSC Service Menu
04- Soft Count
05- Marker Bank
06- Front Window
07- Fill Bank
08- Main Bank
09- Casino Accounting
10- Patron Management
11- Collections Menu
12- Sales & Marketing
13- Table Games Analysis Menu
14- CIC Menu
15- Casino Management Menu
16- Slot Accounting Menu
17- Patron Analysis Menu
18- Simulcast/Keno Menu
19- Telemarketing Rep Menu
20- Mail Processing Menu
21- Pin Booth Menu
22- Club Access
23- Internal Audit Menu
24- Consolidated Cage Menu
30- Year End Gaming History Request Menu
31- Casino Purge Menu
40- Remote Rep Menu
50- SMS System Control Menu
51- Valet Control Menu
52- Slot Supervisor Menu
53- SMS Dispatcher Menu
54- Surveillance Menu
55- Slot Attendant Station
56- SMS Marketing Menu
60- Hotel System Main Menu
61- Bus Marketing System
96- Work with Submitted Jobs
97- Work with Spooled Files
98- Control File Maintenance
99- Sign Off
Option 50
Auth
Password
F5=Clear Auth
MA
23/022
1902 - Session successfully started
\\acsc-file-01\HP4100_DEV on Ne02:
start
Inbox-Microsoft Out...
Session A-(24x82)
http://tuner1.dc1.so...
Power-System-Come...
10:54 AM

FIG.69

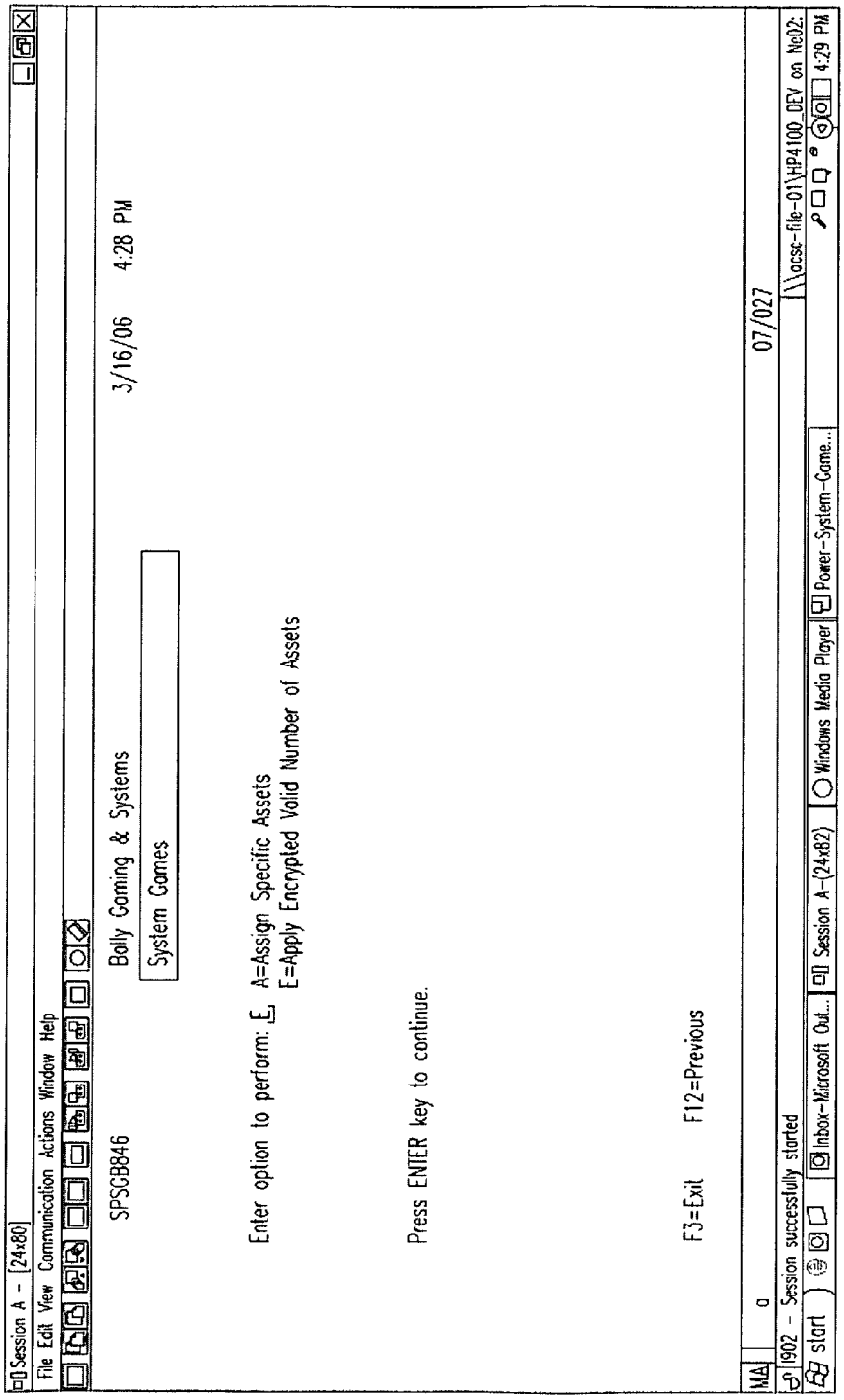

7100
Session A - [24x80]
File Edit View Communication Actions Window Help
SPSCB846
Bally Gaming & Systems
System Games
3/16/06 4:28 PM
Enter option to perform: E A=Assign Specific Assets
E=Apply Encrypted Valid Number of Assets
Press ENTER key to continue.
F3=Exit F12=Previous
MA
07/027
1902 - Session successfully started
\\acsc-file-01\HP4100_DEV on Ne02:
start
Inbox-Microsoft Out...
Session A-(24x82)
Windows Media Player
Power-System-Game...
4:29 PM

FIG. 70

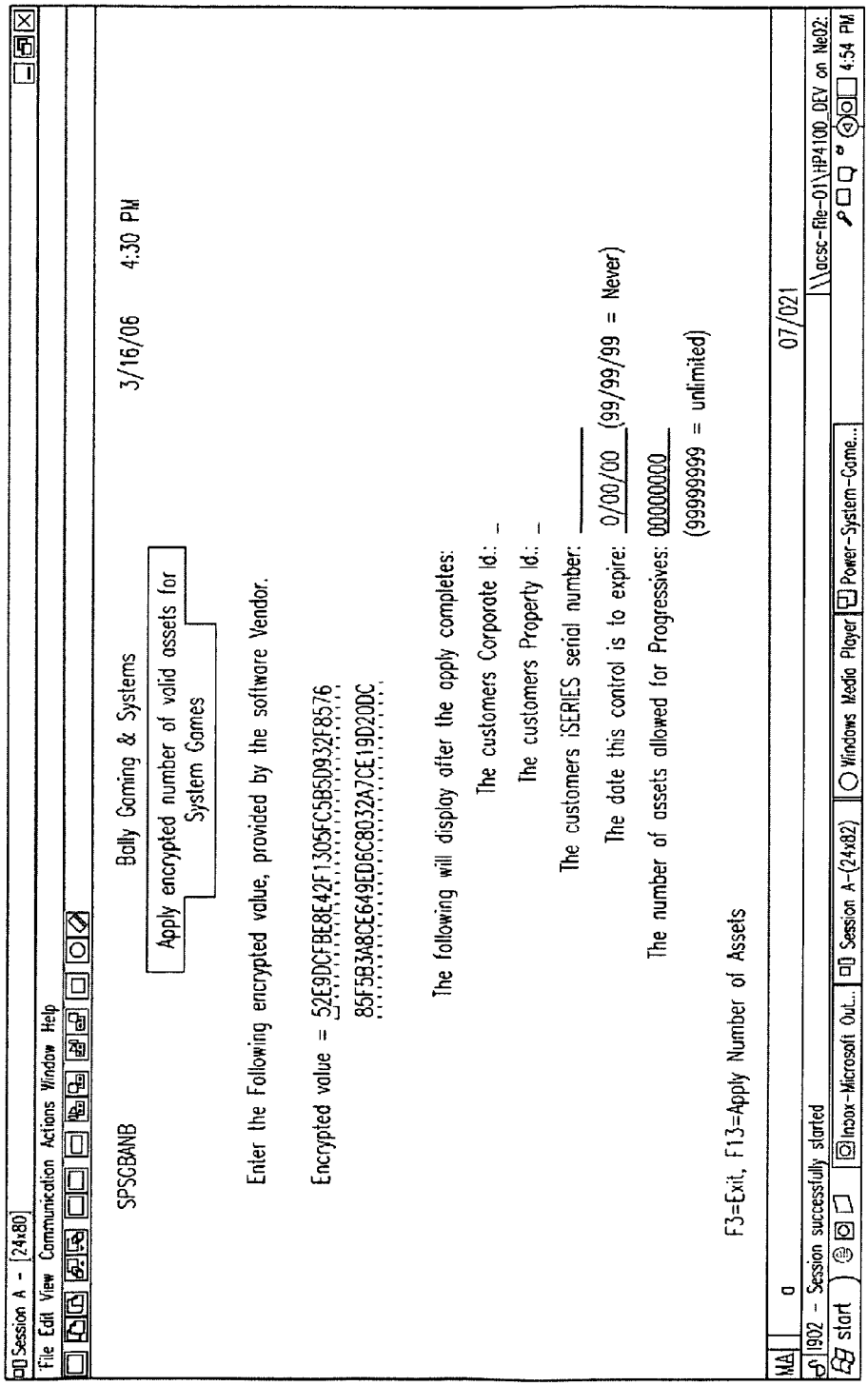

710C
Session A - [24x80]
File Edit View Communication Actions Window Help
SPSCBANB
Bally Gaming & Systems
3/16/06 4:30 PM
Apply encrypted number of valid assets for System Games
Enter the Following encrypted value, provided by the software Vendor.
Encrypted value = 52E9DCFBE8E42F1305FC5B5D932F8576
85F5B3A8CE649ED6C8032A7CE19D20DC
The following will display after the apply completes:
The customers Corporate Id: _
The customers Property Id: _
The customers iSERIES serial number: _____
The date this control is to expire: 0/00/00 (99/99/99 = Never)
The number of assets allowed for Progressives: 00000000
(999999999 = unlimited)
F3=Exit, F13=Apply Number of Assets
MA
a
07/021
1902 - Session successfully started
\\acsc-file-01\HP4100_DEV on Ne02:
start
Inbox - Microsoft Out...
Session A - [24x82]
Windows Media Player
Power-System-Game...
4:54 PM

FIG. 71

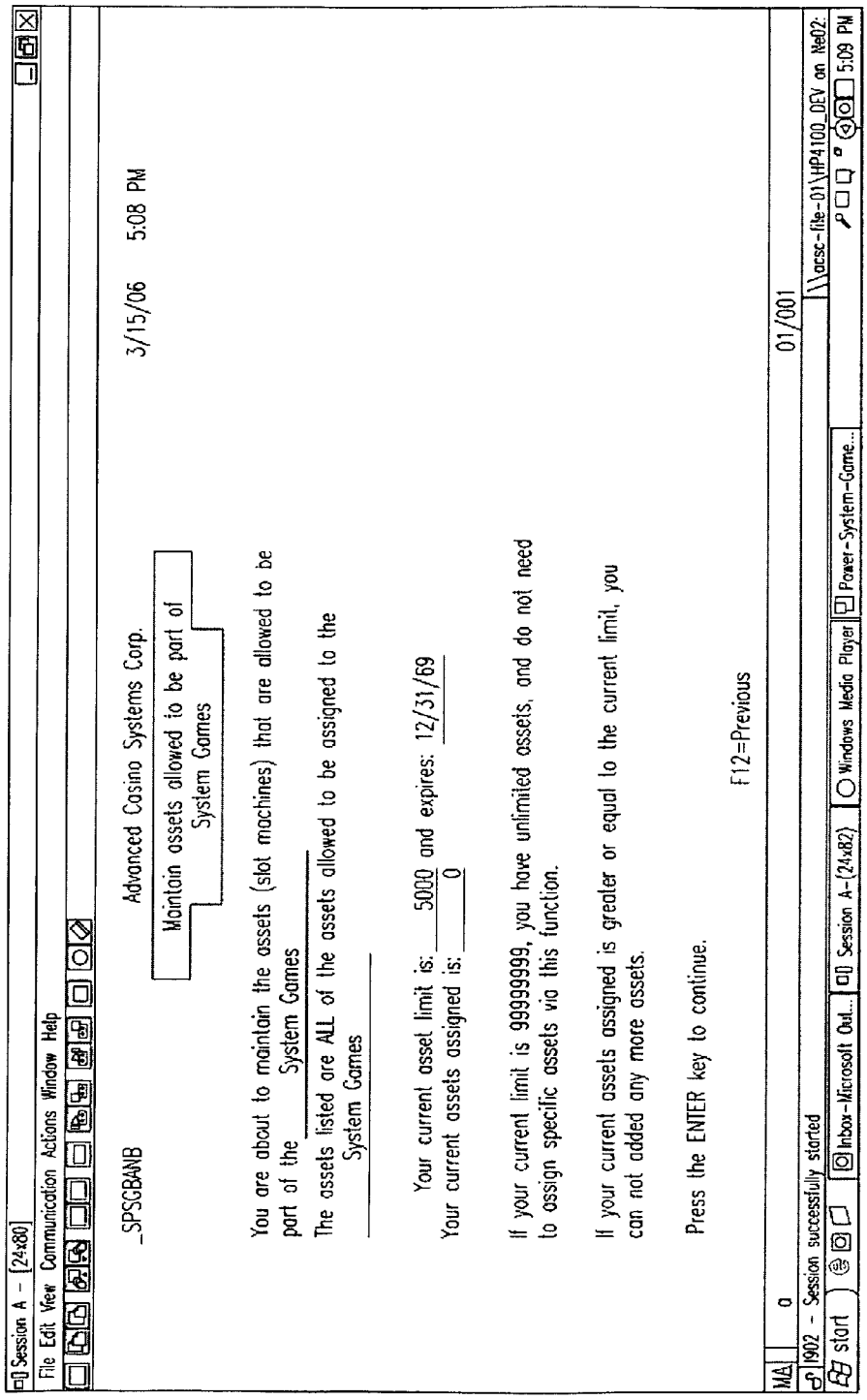

7200
Session A - [24x80]
File Edit View Communication Actions Window Help
_SPSGBANB
Advanced Casino Systems Corp.
3/15/06 5:08 PM
Maintain assets allowed to be part of System Games
You are about to maintain the assets (slot machines) that are allowed to be part of the System Games
The assets listed are ALL of the assets allowed to be assigned to the System Games
Your current asset limit is: 5000 and expires: 12/31/69
Your current assets assigned is: 0
If your current limit is 99999999, you have unlimited assets, and do not need to assign specific assets via this function.
If your current assets assigned is greater or equal to the current limit, you can not added any more assets.
Press the ENTER key to continue.
F12=Previous
MA 0
01/001
1902 - Session successfully started
\\csc-file-01\HP4100_DEV on Net02:
start
Inbox-Microsoft Out...
Session A-(24x82)
Windows Media Player
Power-System-Game...
5:09 PM

FIG.72

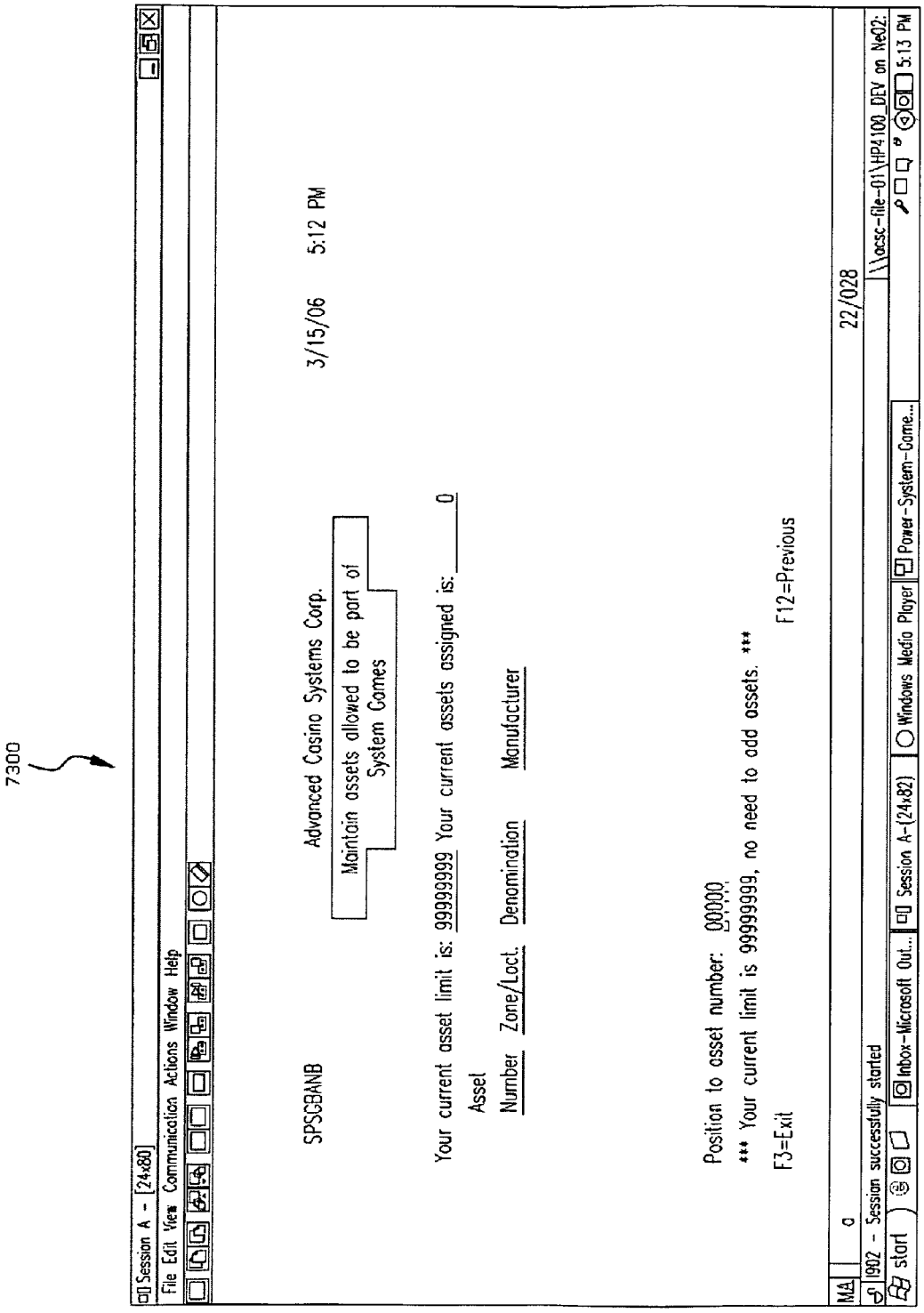

7300
Session A - [24x80]
File Edit View Communication Actions Window Help
SPSGBANB
Advanced Casino Systems Corp.
3/15/06 5:12 PM
Maintain assets allowed to be part of System Games
Your current asset limit is: 99999999 Your current assets assigned is: 0
Asset Number
Zone/Loct.
Denomination
Manufacturer
Position to asset number: 00000
*** Your current limit is 99999999, no need to add assets. ***
F3=Exit
F12=Previous
MA
a
22/028
1902 - Session successfully started
\\cssc-file-01\HP4100_DEV on Ne02:
start
Inbox-Microsoft Out...
Session A-(24x82)
Windows Media Player
Power-System-Game...
5:13 PM

FIG. 73

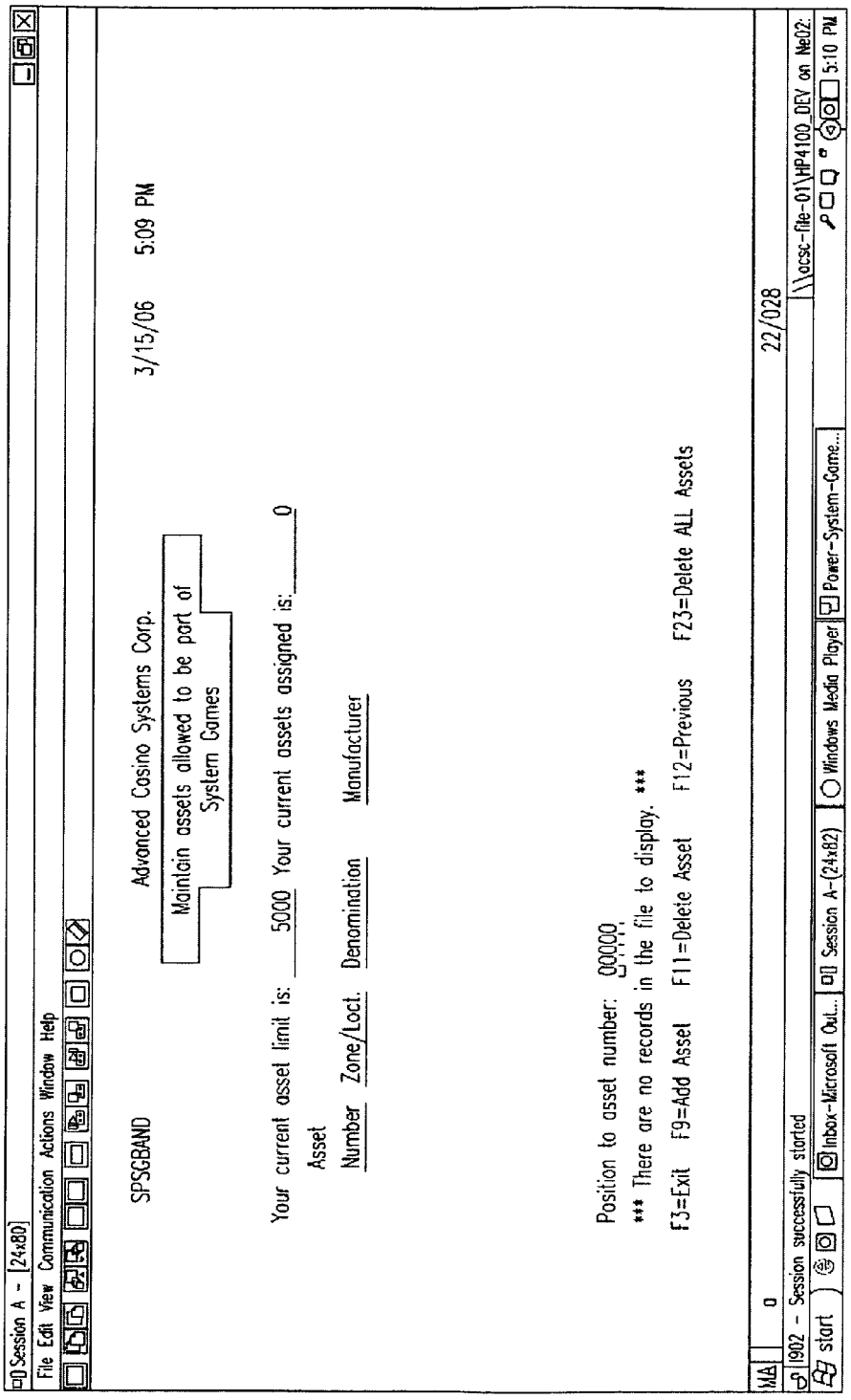

7400
Session A - [24x80]
File Edit View Communication Actions Window Help
SPSGBAND
Advanced Casino Systems Corp.
3/15/06 5:09 PM
Maintain assets allowed to be part of System Games
Your current asset limit is: 5000 Your current assets assigned is: 0
Asset Number Zone/Loct. Denomination Manufacturer
Position to asset number: 00000
*** There are no records in the file to display. ***
F3=Exit F9=Add Asset F11=Delete Asset F12=Previous F23=Delete ALL Assets
MA 0 22/028
1902 - Session successfully started
\\csc-file-01\HP4100_DEV on Ne02:
start Inbox-Microsoft Out... Session A-(24x82) Windows Media Player Power-System-Come... 5:10 PM

FIG. 74

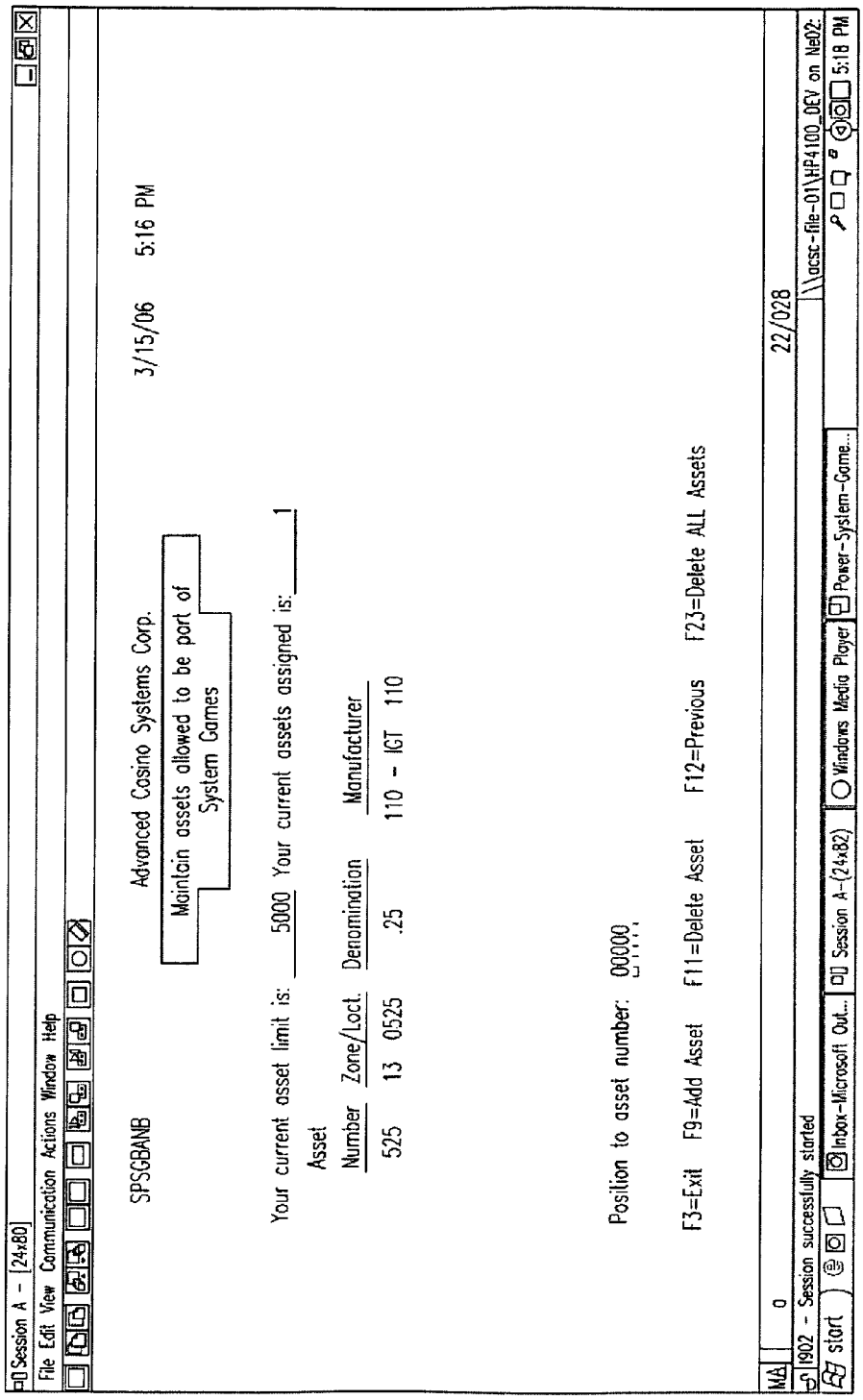

7500
Session A - [24x80]
File Edit View Communication Actions Window Help
SPSGBANB
Advanced Casino Systems Corp.
3/15/06 5:16 PM
Maintain assets allowed to be part of System Games
Your current asset limit is: 5000 Your current assets assigned is: 1
Asset Number
Zone/Loct.
Denomination
Manufacturer
525 13 0525 .25 110 - IGT 110
Position to asset number: 00000
F3=Exit F9=Add Asset F11=Delete Asset F12=Previous F23=Delete ALL Assets
MA 0 22/028
1902 - Session successfully started
\\acsc-file-01\HP4100_DEV on Ne02:
start
Inbox-Microsoft Out...
Session A-(24x82)
Windows Media Player
Power-System-Game...
5:18 PM

FIG. 75

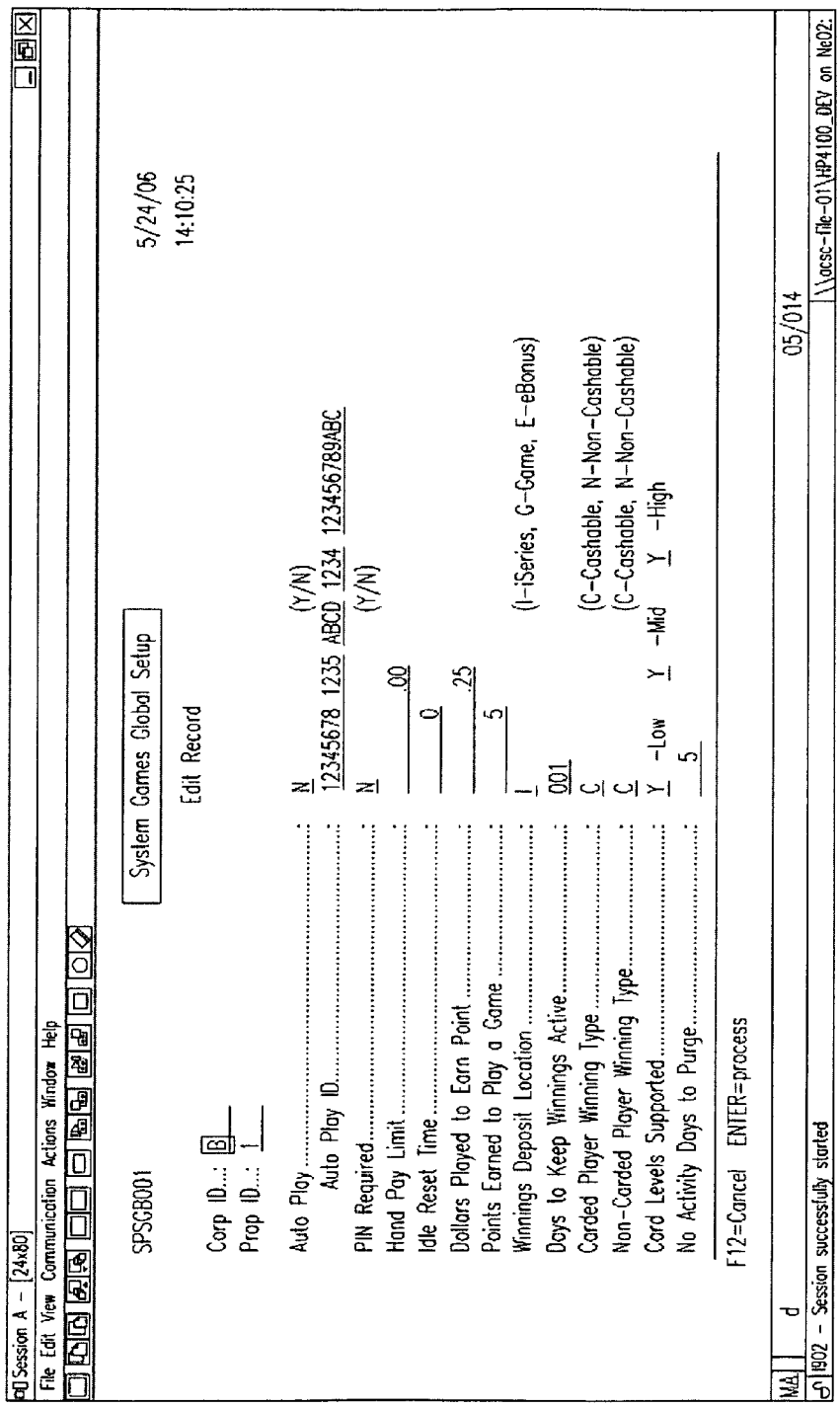

7600
Session A - [24x80]
File Edit View Communication Actions Window Help
SPSGB001
System Games Global Setup
5/24/06
14:10:25
Edit Record
Corp ID...: B
Prop ID...: 1
Auto Play ..... N (Y/N)
Auto Play ID..... 12345678 1235 ABCD 1234 123456789ABC
PIN Required ..... N (Y/N)
Hand Pay Limit 00
Idle Reset Time 0
Dollars Played to Earn Point 25
Points Earned to Play a Game 5
Winnings Deposit Location ..... 1 (1-iSeries, G-Game, E-eBonus)
Days to Keep Winnings Active 001
Carded Player Winning Type ..... C (C-Cashable, N-Non-Cashable)
Non-Carded Player Winning Type ..... C (C-Cashable, N-Non-Cashable)
Card Levels Supported ..... Y -Low Y -Mid Y -High
No Activity Days to Purge 5
F12=Cancel ENTER=process
MA d
05/014
6802 - Session successfully started
\\acsc-file-01\HP4100_DEV on Ne02:

FIG. 76

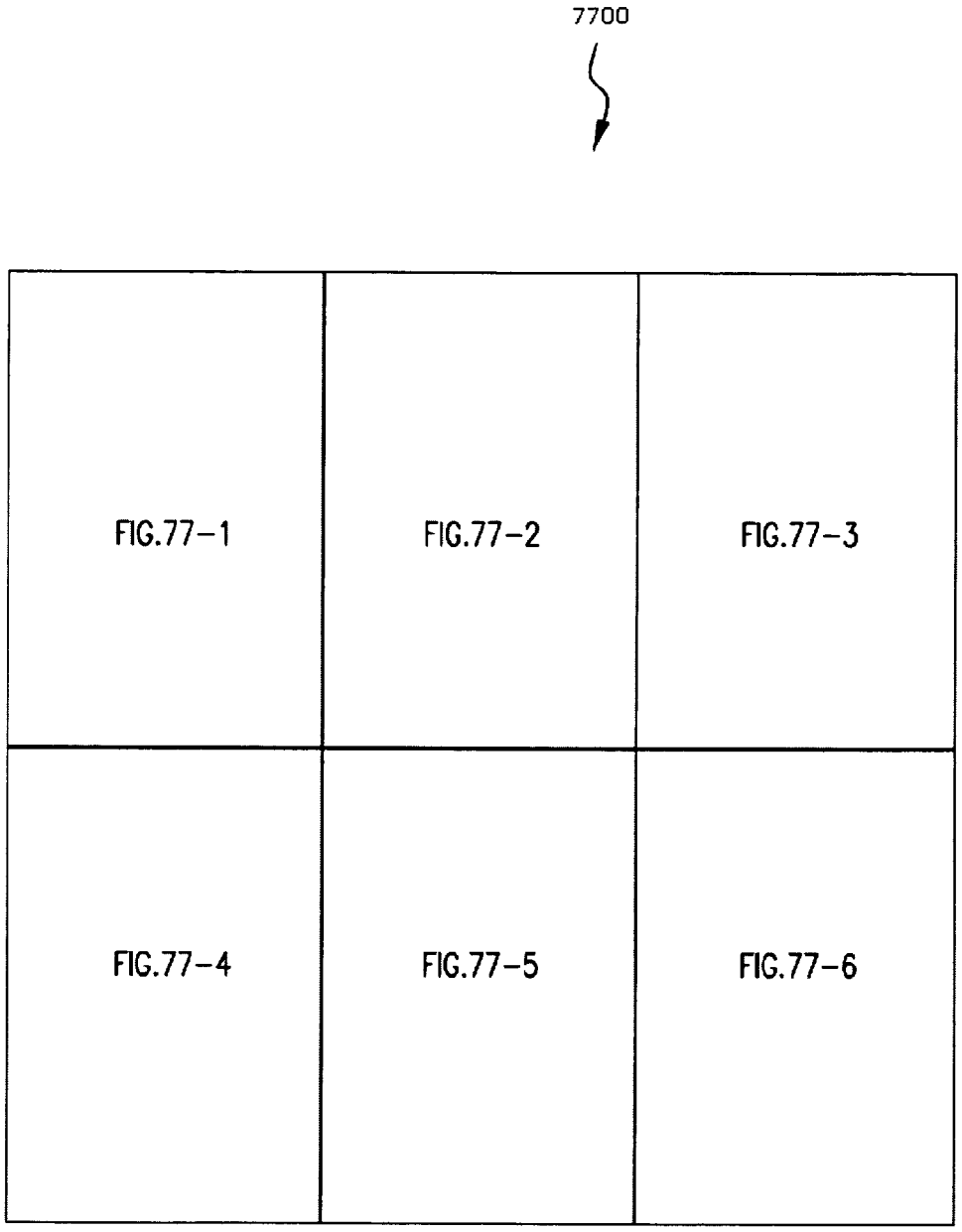


FIG.77

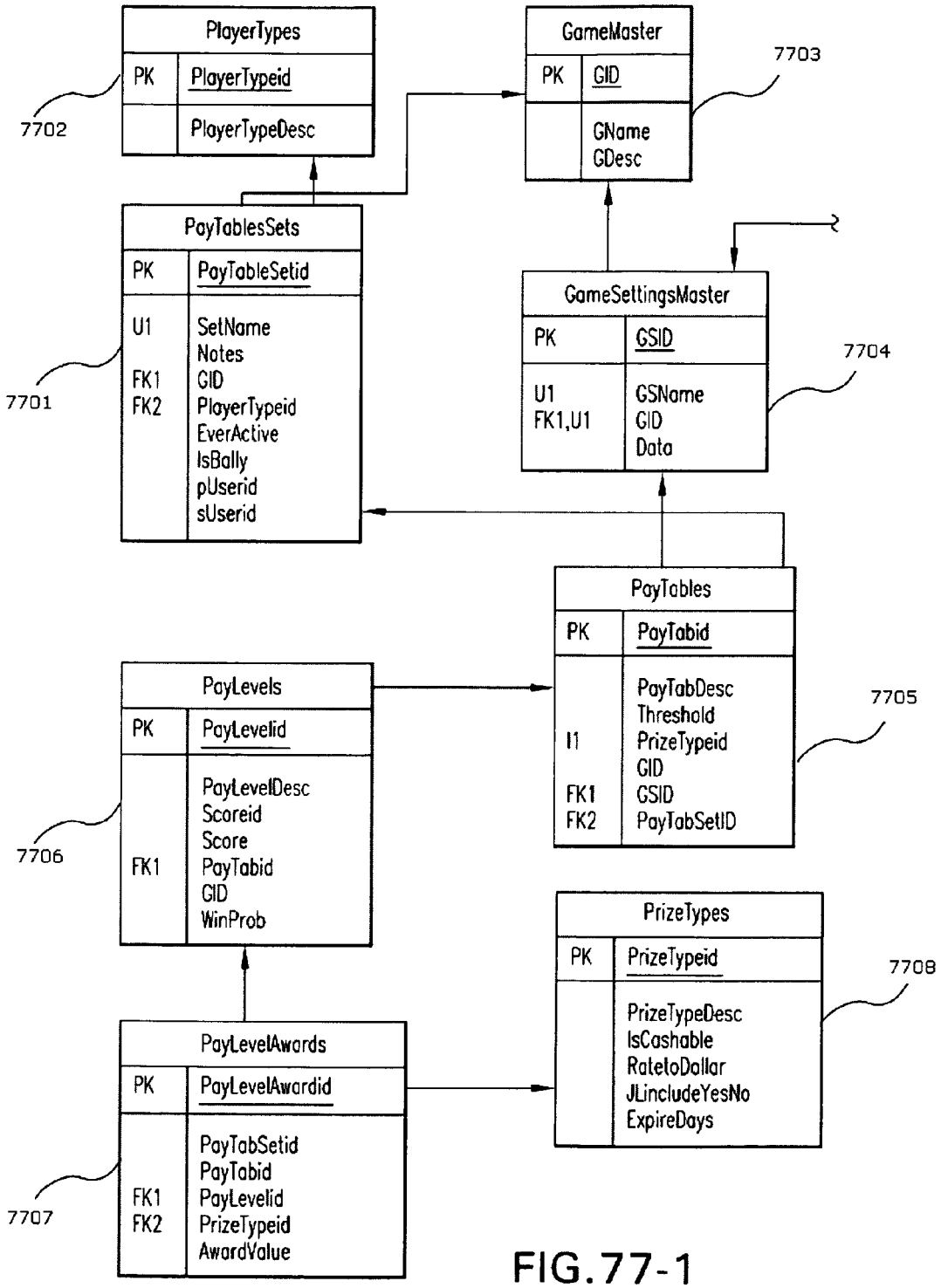

PlayerTypes
PK PlayerTypeid
PlayerTypeDesc
7702
GameMaster
PK GID
GName
GDesc
7703
PayTablesSets
PK PayTableSetid
U1 SetName
Notes
FK1 GID
FK2 PlayerTypeid
EverActive
IsBally
pUserid
sUserid
7701
GameSettingsMaster
PK GSID
U1 GSName
FK1,U1 GID
Data
7704
PayTables
PK PayTabid
PayTabDesc
Threshold
I1 PrizeTypeid
GID
FK1 GSID
FK2 PayTabSetID
7705
PayLevels
PK PayLevelid
PayLevelDesc
Scoreid
Score
FK1 PayTabid
GID
WinProb
7706
PrizeTypes
PK PrizeTypeid
PrizeTypeDesc
IsCashable
RatetoDollar
JLincludeYesNo
ExpireDays
7708
PayLevelAwards
PK PayLevelAwardid
PayTabSetid
PayTabid
FK1 PayLevelid
FK2 PrizeTypeid
AwardValue
7707

FIG.77-1

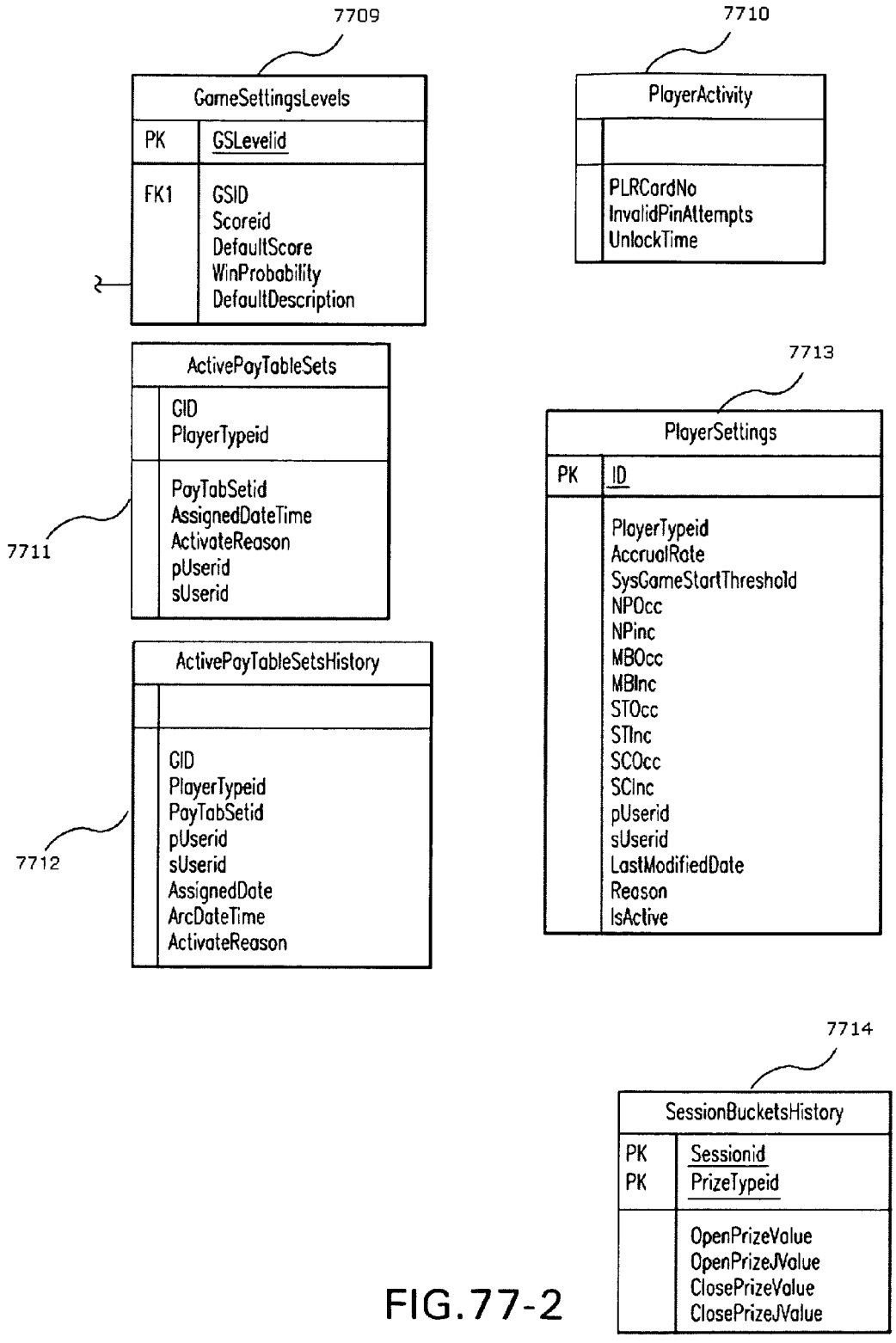

7709
GameSettingsLevels
PK
GSLevelid
FK1
GSID
Scoreid
DefaultScore
WinProbability
DefaultDescription
7710
PlayerActivity
PLRCardNo
InvalidPinAttempts
UnlockTime
ActivePayTableSets
GID
PlayerTypeid
PayTabSetid
AssignedDateTime
ActivateReason
pUserid
sUserid
7711
7713
PlayerSettings
PK
ID
PlayerTypeid
AccrualRate
SysGameStartThreshold
NPOcc
NPInc
MBOcc
MBInc
STOcc
STInc
SCOcc
SCInc
pUserid
sUserid
LastModifiedDate
Reason
IsActive
ActivePayTableSetsHistory
GID
PlayerTypeid
PayTabSetid
pUserid
sUserid
AssignedDate
ArcDateTime
ActivateReason
7712
7714
SessionBucketsHistory
PK
Sessionid
PK
PrizeTypeid
OpenPrizeValue
OpenPrizeJValue
ClosePrizeValue
ClosePrizeJValue

FIG.77-2

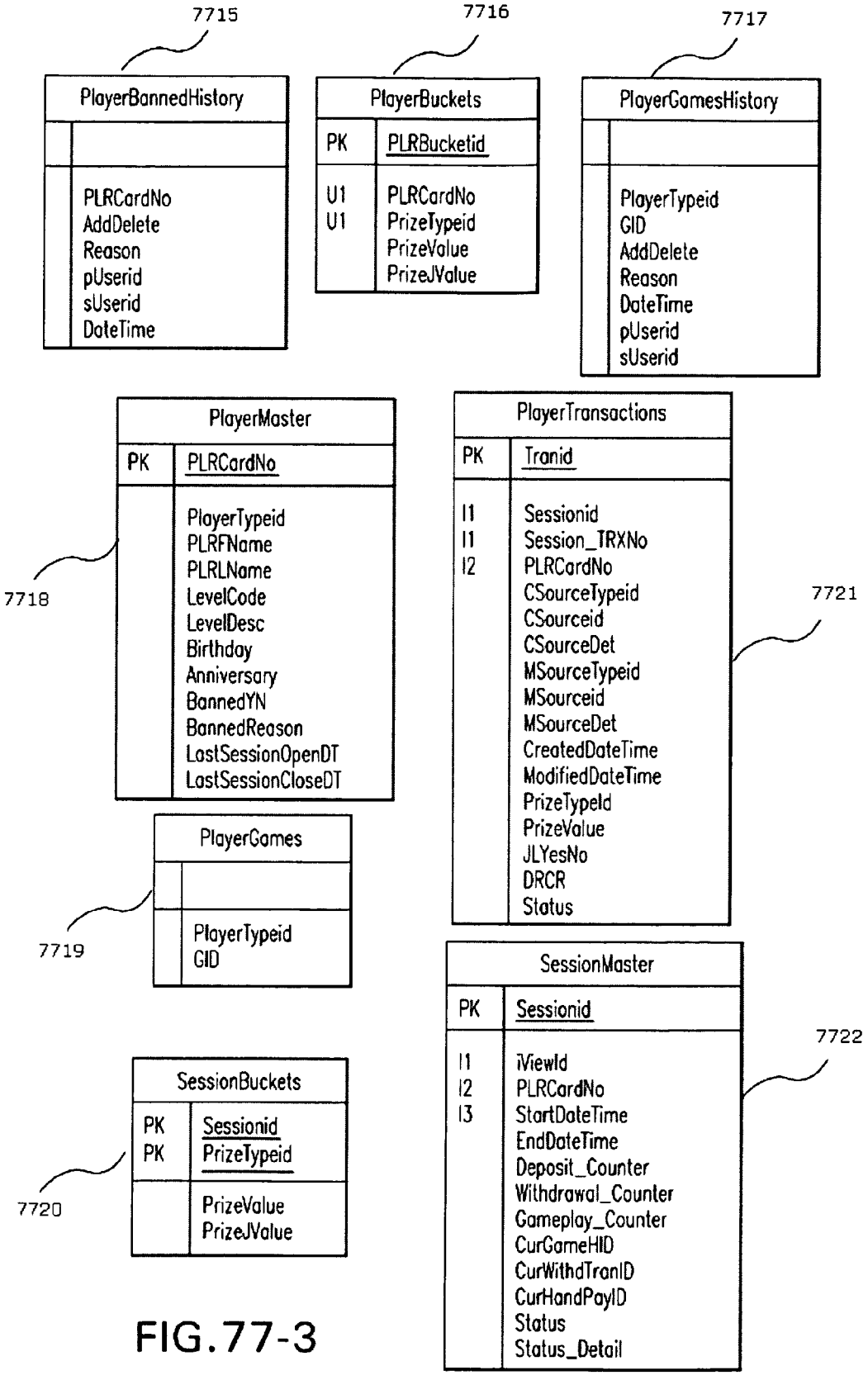

7715
PlayerBannedHistory
PLRCardNo
AddDelete
Reason
pUserid
sUserid
DateTime
7716
PlayerBuckets
PK PLRBucketid
U1 PLRCardNo
U1 PrizeTypeid
PrizeValue
PrizeJValue
7717
PlayerGamesHistory
PlayerTypeid
GID
AddDelete
Reason
DateTime
pUserid
sUserid
PlayerMaster
PK PLRCardNo
PlayerTypeid
PLRFName
PLRLName
LevelCode
LevelDesc
Birthday
Anniversary
BannedYN
BannedReason
LastSessionOpenDT
LastSessionCloseDT
7718
PlayerTransactions
PK Tranid
I1 Sessionid
I1 Session_TRXNo
I2 PLRCardNo
CSourceTypeid
CSourceid
CSourceDet
MSourceTypeid
MSourceid
MSourceDet
CreatedDateTime
ModifiedDateTime
PrizeTypeId
PrizeValue
JLYesNo
DRCR
Status
7721
PlayerGames
PlayerTypeid
GID
7719
SessionMaster
PK Sessionid
I1 iViewId
I2 PLRCardNo
I3 StartDateTime
EndDateTime
Deposit_Counter
Withdrawal_Counter
Gameplay_Counter
CurGameHID
CurWithdTranID
CurHandPayID
Status
Status_Detail
7722
SessionBuckets
PK Sessionid
PK PrizeTypeid
PrizeValue
PrizeJValue
7720

FIG.77-3

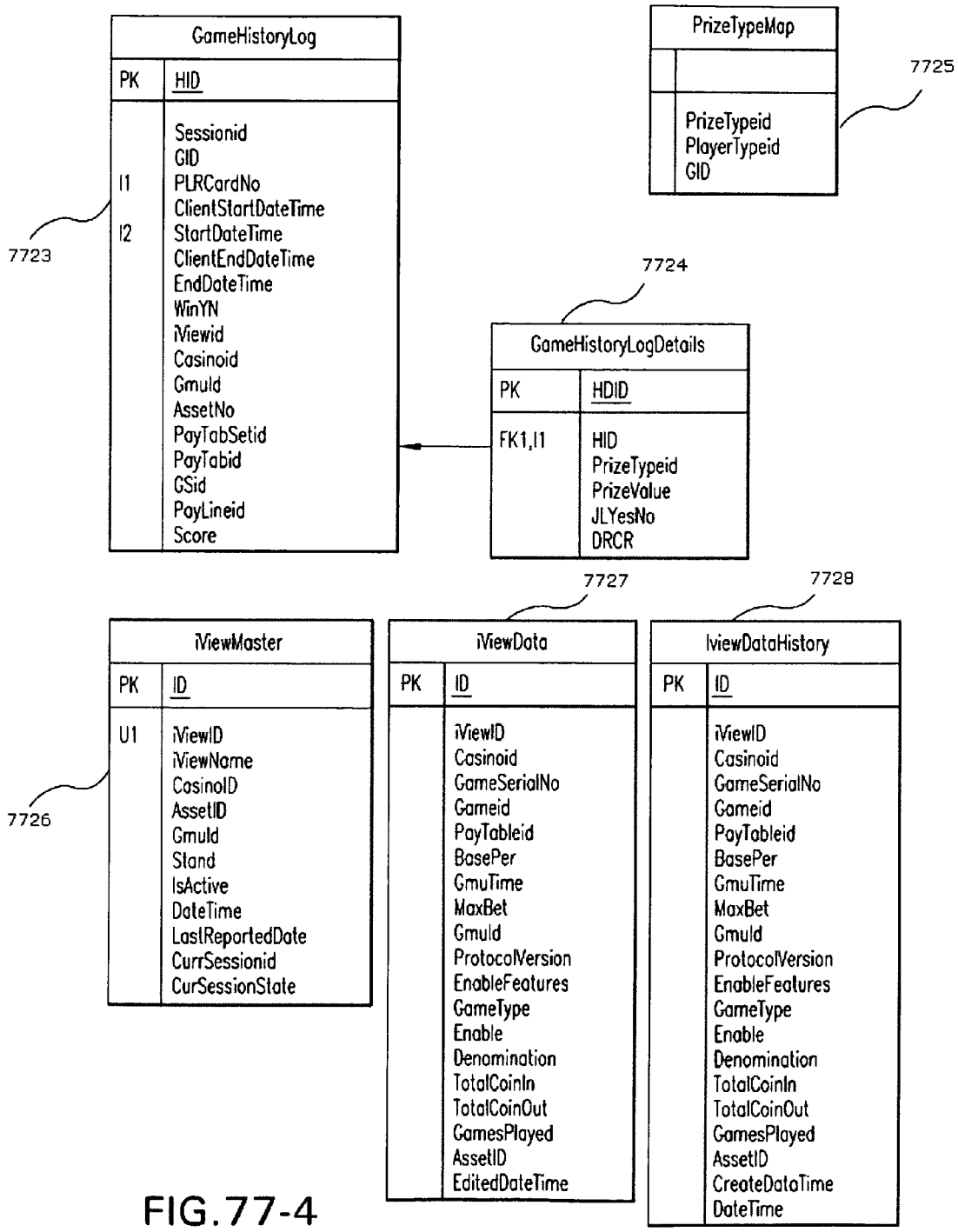

GameHistoryLog
PK
HID
Sessionid
GID
I1
PLRCardNo
ClientStartDateTime
I2
StartDateTime
ClientEndDateTime
EndDateTime
WinYN
iViewid
Casinoid
Gmuld
AssetNo
PayTabSetid
PayTabid
GSid
PayLineid
Score
7723
PrizeTypeMap
PrizeTypeid
PlayerTypeid
GID
7725
7724
GameHistoryLogDetails
PK
HDID
FK1,I1
HID
PrizeTypeid
PrizeValue
JLYesNo
DRCR
7727
7728
iViewMaster
PK
ID
U1
iViewID
iViewName
CasinoID
AssetID
Gmuld
Stand
IsActive
DateTime
LastReportedDate
CurrSessionid
CurSessionState
7726
iViewData
PK
ID
iViewID
Casinoid
GameSerialNo
Gameid
PayTableid
BasePer
GmuTime
MaxBet
Gmuld
ProtocolVersion
EnableFeatures
GameType
Enable
Denomination
TotalCoinIn
TotalCoinOut
GamesPlayed
AssetID
EditedDateTime
iviewDataHistory
PK
ID
iViewID
Casinoid
GameSerialNo
Gameid
PayTableid
BasePer
GmuTime
MaxBet
Gmuld
ProtocolVersion
EnableFeatures
GameType
Enable
Denomination
TotalCoinIn
TotalCoinOut
GamesPlayed
AssetID
CreateDataTime
DateTime

FIG.77-4

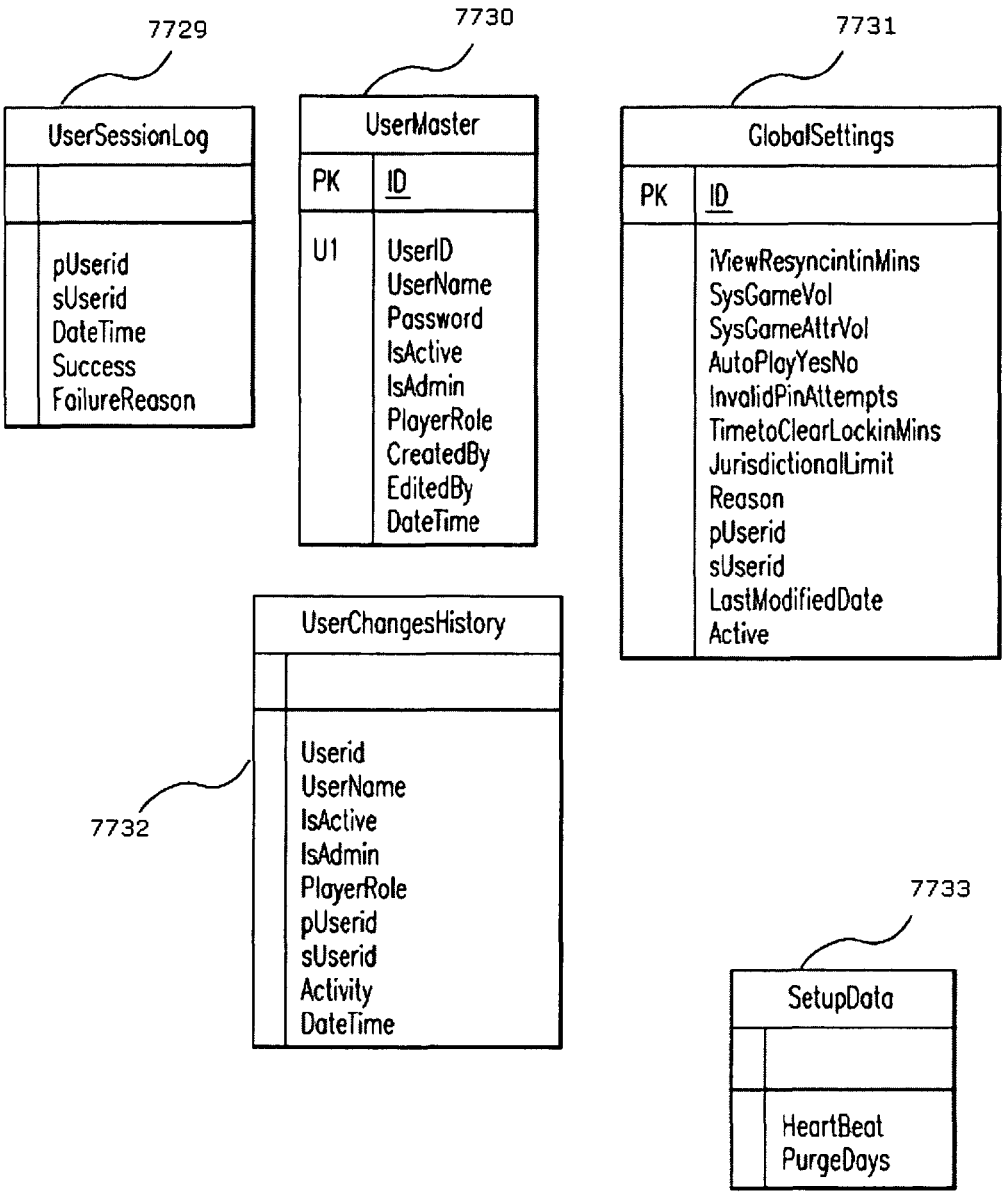

7729
UserSessionLog
pUserid
sUserid
DateTime
Success
FailureReason
7730
UserMaster
PK
ID
U1
UserID
UserName
Password
IsActive
IsAdmin
PlayerRole
CreatedBy
EditedBy
DateTime
7731
GlobalSettings
PK
ID
iViewResyncintinMins
SysGameVol
SysGameAttrVol
AutoPlayYesNo
InvalidPinAttempts
TimetoClearLockinMins
JurisdictionalLimit
Reason
pUserid
sUserid
LastModifiedDate
Active
UserChangesHistory
7732
Userid
UserName
IsActive
IsAdmin
PlayerRole
pUserid
sUserid
Activity
DateTime
7733
SetupData
HeartBeat
PurgeDays

FIG.77-5

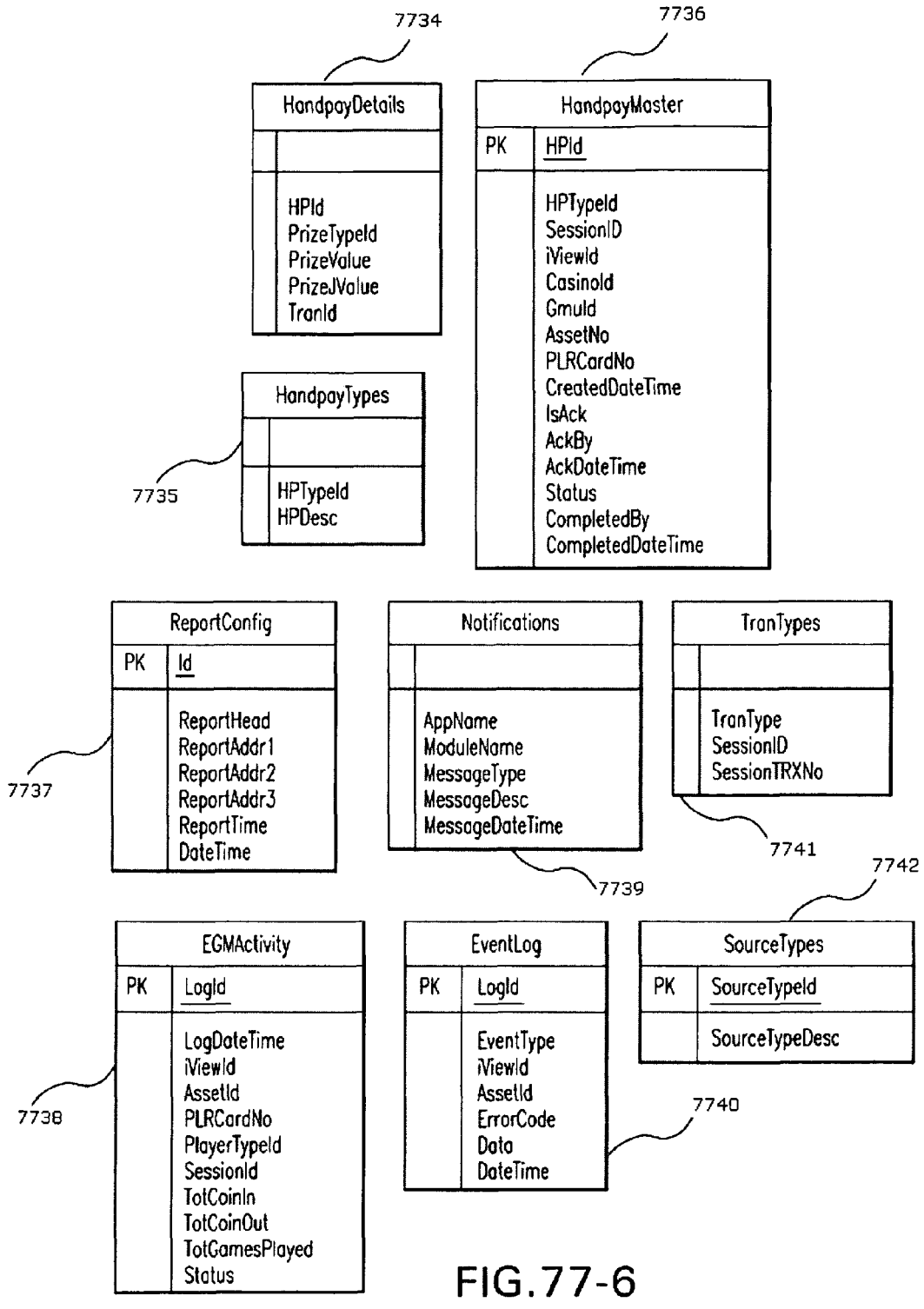

7734
HandpayDetails
HPId
PrizeTypeId
PrizeValue
PrizeJValue
TranId
7736
HandpayMaster
PK
HPId
HPTypeId
SessionID
iViewId
CasinoId
GmuId
AssetNo
PLRCardNo
CreatedDateTime
IsAck
AckBy
AckDateTime
Status
CompletedBy
CompletedDateTime
HandpayTypes
7735
HPTypeId
HPDesc
ReportConfig
PK
Id
7737
ReportHead
ReportAddr1
ReportAddr2
ReportAddr3
ReportTime
DateTime
Notifications
AppName
ModuleName
MessageType
MessageDesc
MessageDateTime
7739
TranTypes
TranType
SessionID
SessionTRXNo
7741
7742
EGMActivity
PK
LogId
7738
LogDateTime
iViewId
AssetId
PLRCardNo
PlayerTypeId
SessionId
TotCoinIn
TotCoinOut
TotGamesPlayed
Status
EventLog
PK
LogId
EventType
iViewId
AssetId
ErrorCode
Data
DateTime
7740
SourceTypes
PK
SourceTypeId
SourceTypeDesc

FIG.77-6

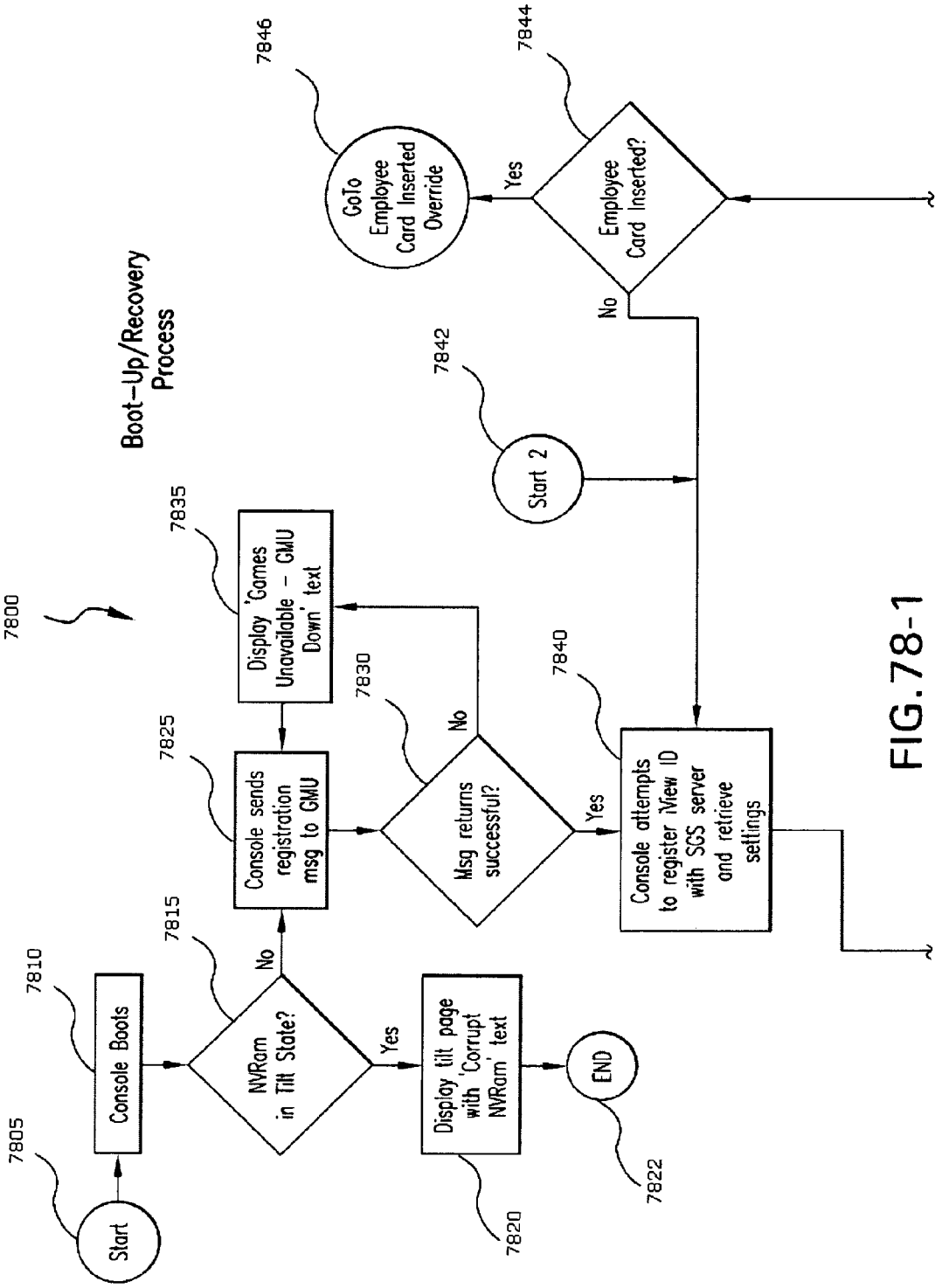

Boot-Up/Recovery Process
7800
7805
Start
7810
Console Boots
7815
NVRam in Tilt State?
No
Yes
7820
Display tilt page with 'Corrupt NVRam' text
7822
END
7825
Console sends registration msg to GMU
7830
Msg returns successful?
No
Yes
7835
Display 'Games Unavailable - GMU Down' text
7840
Console attempts to register iView ID with SGS server and retrieve settings
7842
Start 2
7844
Employee Card Inserted?
Yes
No
7846
GoTo Employee Card Inserted Override

FIG. 78-1

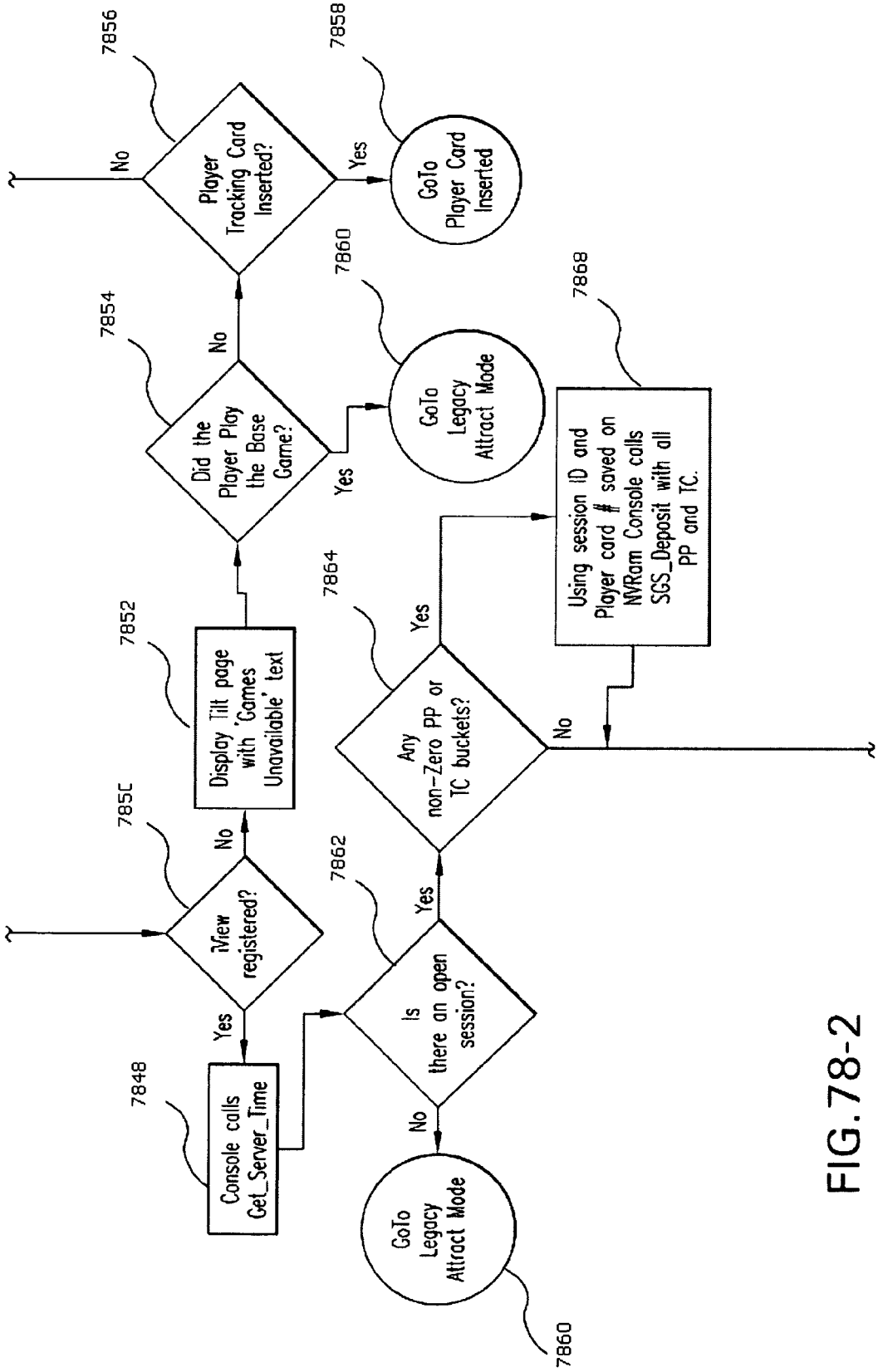

7856
Player Tracking Card Inserted?
No
Yes
7858
GoTo Player Card Inserted
7854
Did the Player Play the Base Game?
No
Yes
7860
GoTo Legacy Attract Mode
7868
Using session ID and Player card # saved on NVRam Console calls SGS_Deposit with all PP and TC.
7864
Any non-Zero PP or TC buckets?
Yes
No
7852
Display Tilt page with 'Games Unavailable' text
No
785C
iView registered?
Yes
7862
Is there an open session?
Yes
No
7848
Console calls Get_Server_Time
7860
GoTo Legacy Attract Mode

FIG. 78-2

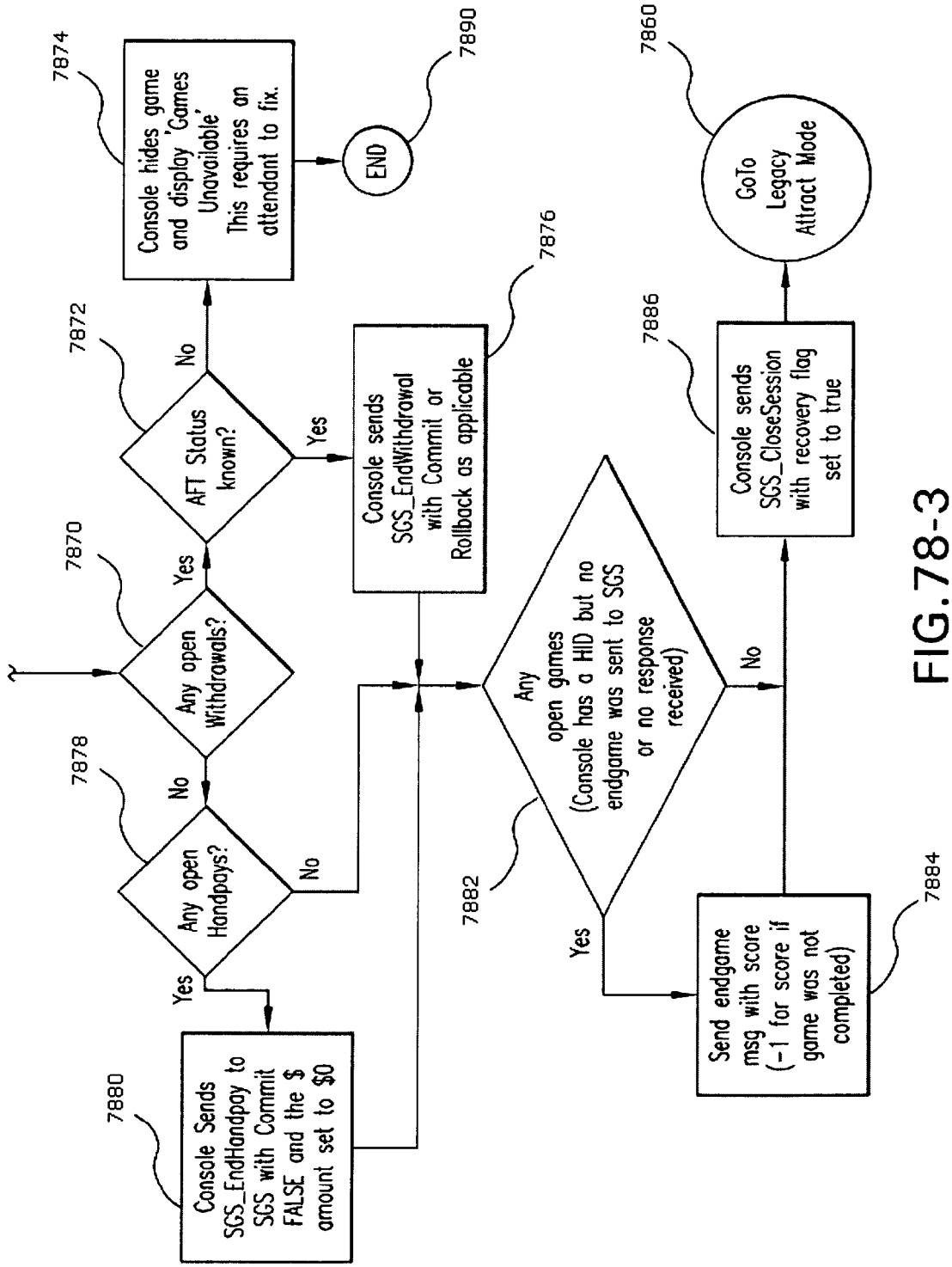

7874
Console hides game and display 'Games Unavailable' This requires an attendant to fix.
END
7890
7872
AFT Status known?
No
Yes
7876
Console sends SGS_EndWithdrawal with Commit or Rollback as applicable
7870
Any open Withdrawals?
Yes
No
7878
Any open Handpays?
No
Yes
7880
Console Sends SGS_EndHandpay to SGS with Commit FALSE and the $ amount set to $0
7882
Any open games (Console has a HID but no endgame was sent to SGS or no response received)
No
Yes
7884
Send endgame msg with score (-1 for score if game was not completed)
7886
Console sends SGS_CloseSession with recovery flag set to true
7860
GoTo Legacy Attract Mode

FIG. 78-3

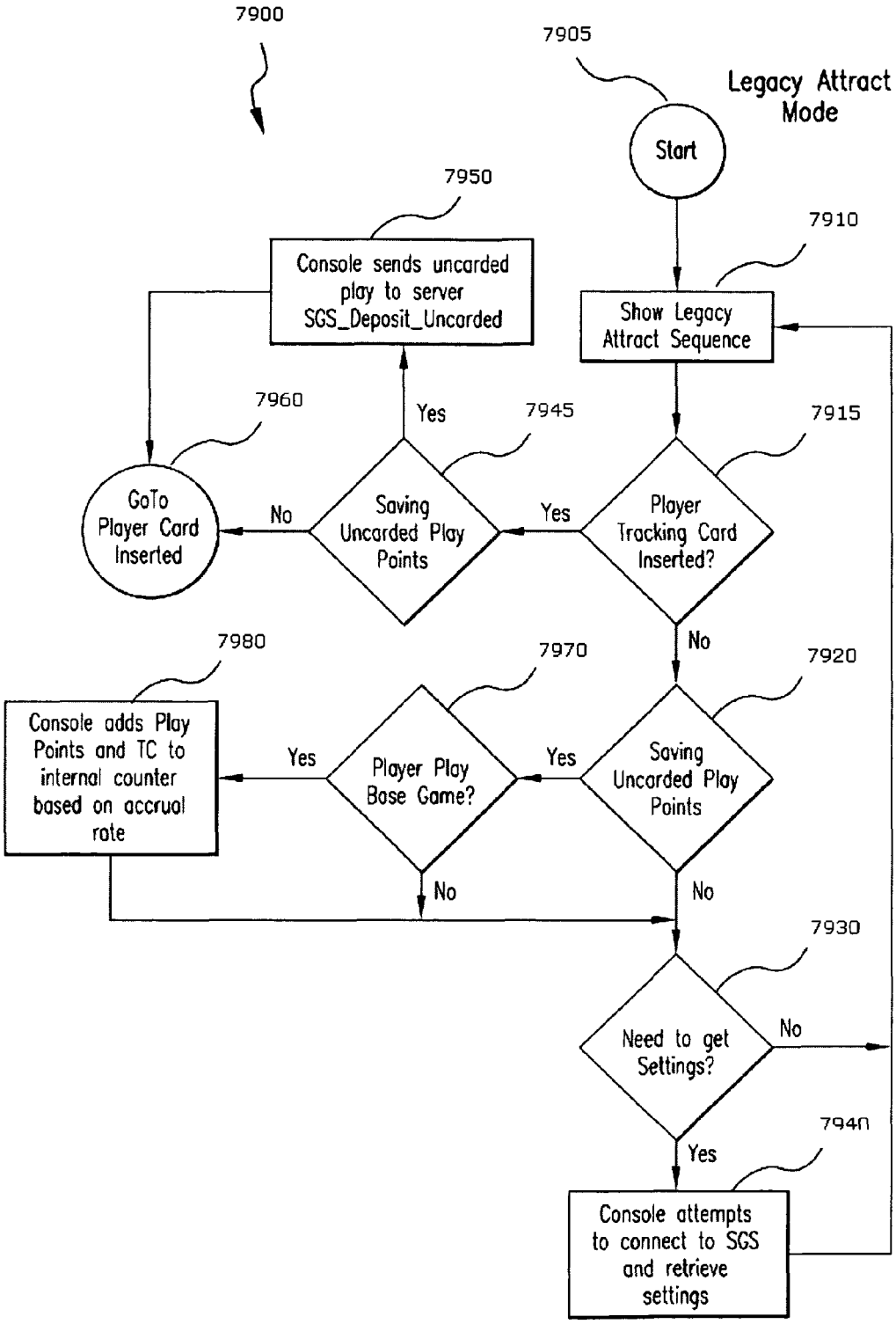

7900
7905
Legacy Attract Mode
Start
7910
Show Legacy Attract Sequence
7915
Player Tracking Card Inserted?
Yes
7945
Saving Uncarded Play Points
No
7960
GoTo Player Card Inserted
Yes
7950
Console sends uncarded play to server SGS_Deposit_Uncarded
No
7920
Saving Uncarded Play Points
Yes
7970
Player Play Base Game?
Yes
7980
Console adds Play Points and TC to internal counter based on accrual rate
No
No
7930
Need to get Settings?
No
Yes
7940
Console attempts to connect to SGS and retrieve settings

FIG.79

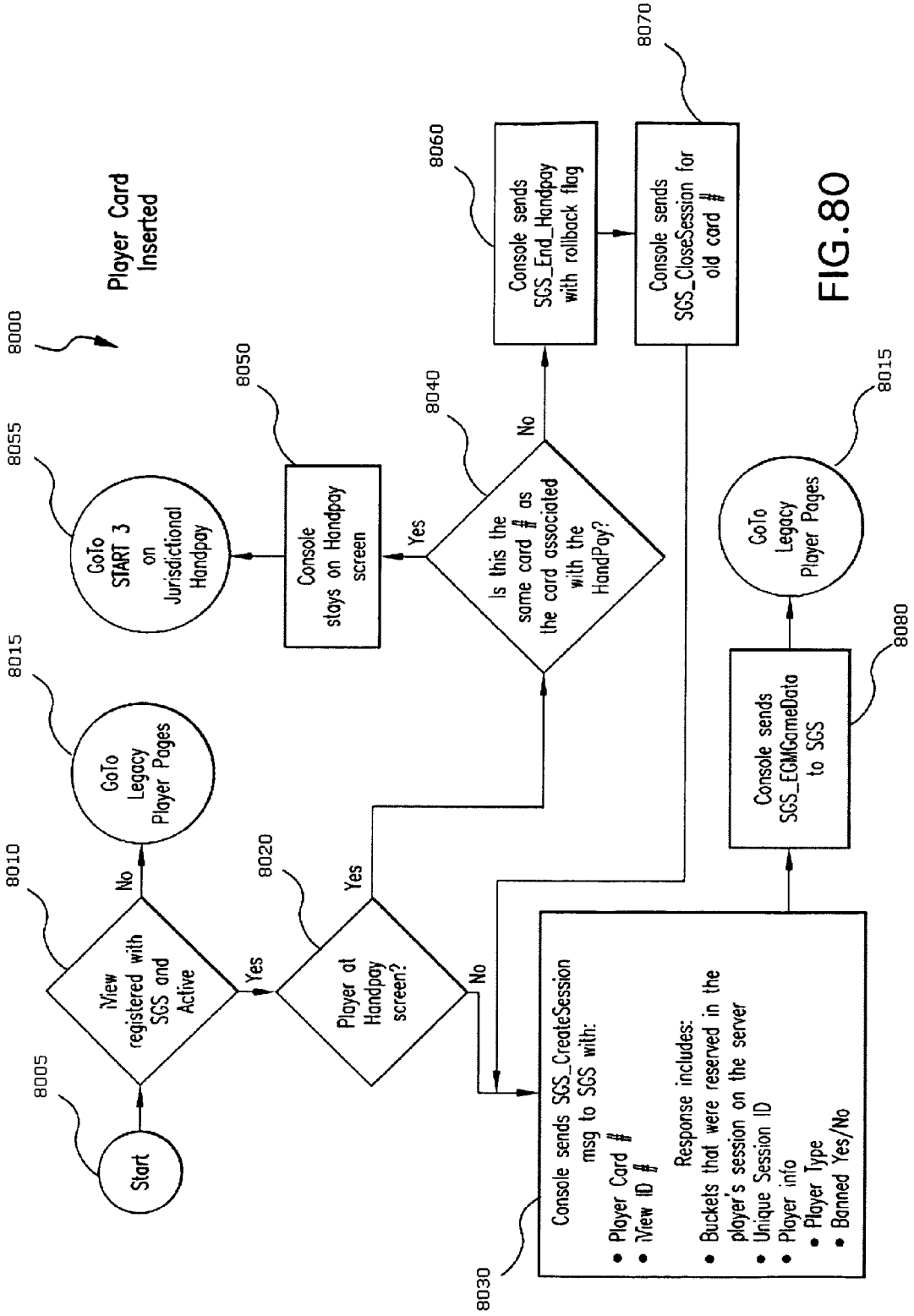

Player Card Inserted
8000
8005
Start
8010
View registered with SGS and Active
No
Yes
8015
GoTo Legacy Player Pages
8020
Player at Handpay screen?
Yes
No
8030
Console sends SGS_CreateSession msg to SGS with:
• Player Card #
• View ID #
Response includes:
• Buckets that were reserved in the player's session on the server
• Unique Session ID
• Player info
• Player Type
• Banned Yes/No
8040
Is this the same card # as the card associated with the HandPay?
No
Yes
8050
Console stays on Handpay screen
8055
GoTo START 3 on Jurisdictional Handpay
8060
Console sends SGS_End_Handpay with rollback flag
8070
Console sends SGS_CloseSession for old card #
8080
Console sends SGS_EGMGameData to SGS
8015
GoTo Legacy Player Pages

FIG.80

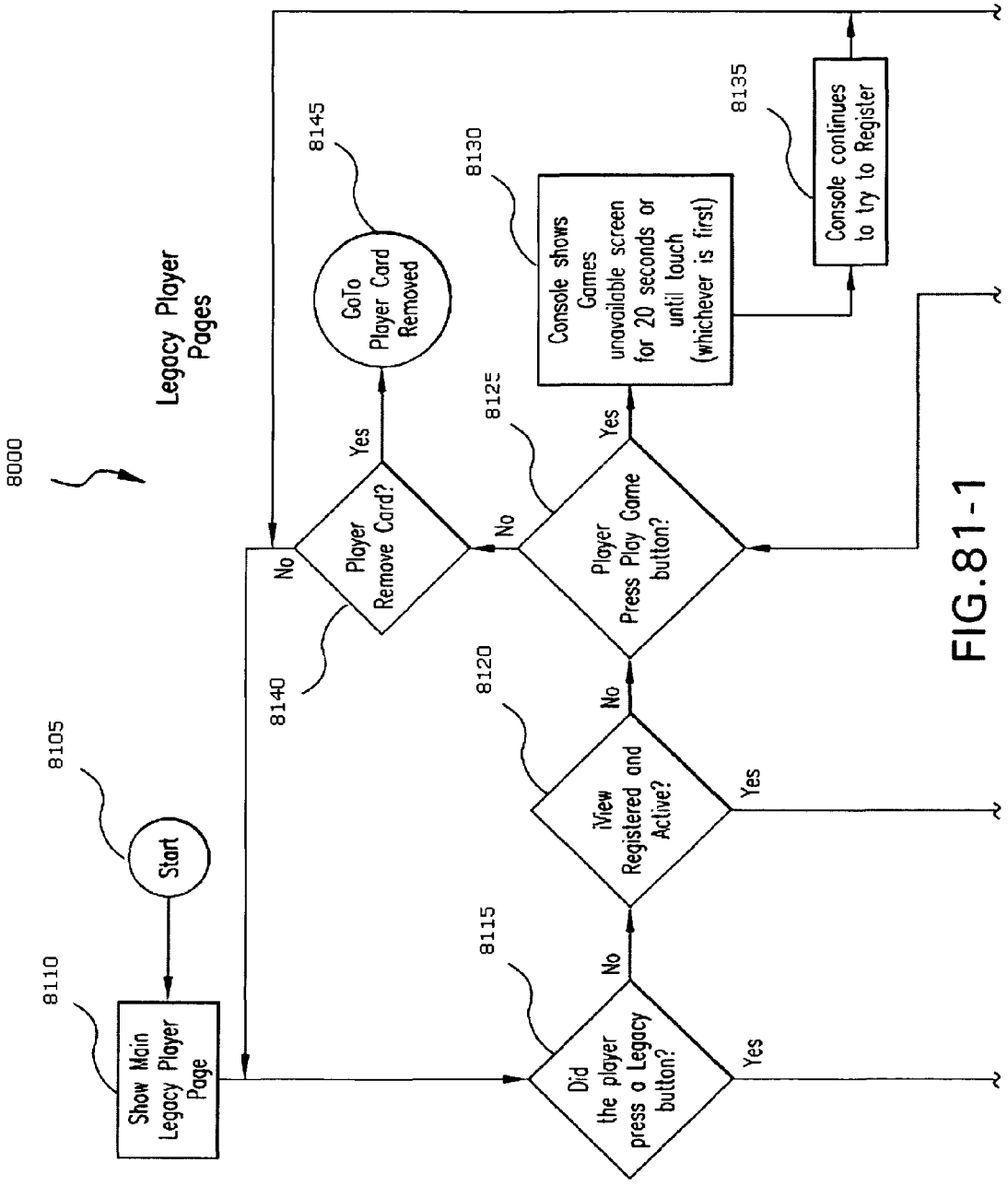

8000
Legacy Player Pages
8105
Start
8110
Show Main Legacy Player Page
8115
Did the player press a Legacy button?
No
Yes
8120
iView Registered and Active?
No
Yes
8125
Player Press Play Game button?
No
Yes
8130
Console shows Games unavailable screen for 20 seconds or until touch (whichever is first)
8135
Console continues to try to Register
8140
Player Remove Card?
No
Yes
8145
GoTo Player Card Removed

FIG.81-1

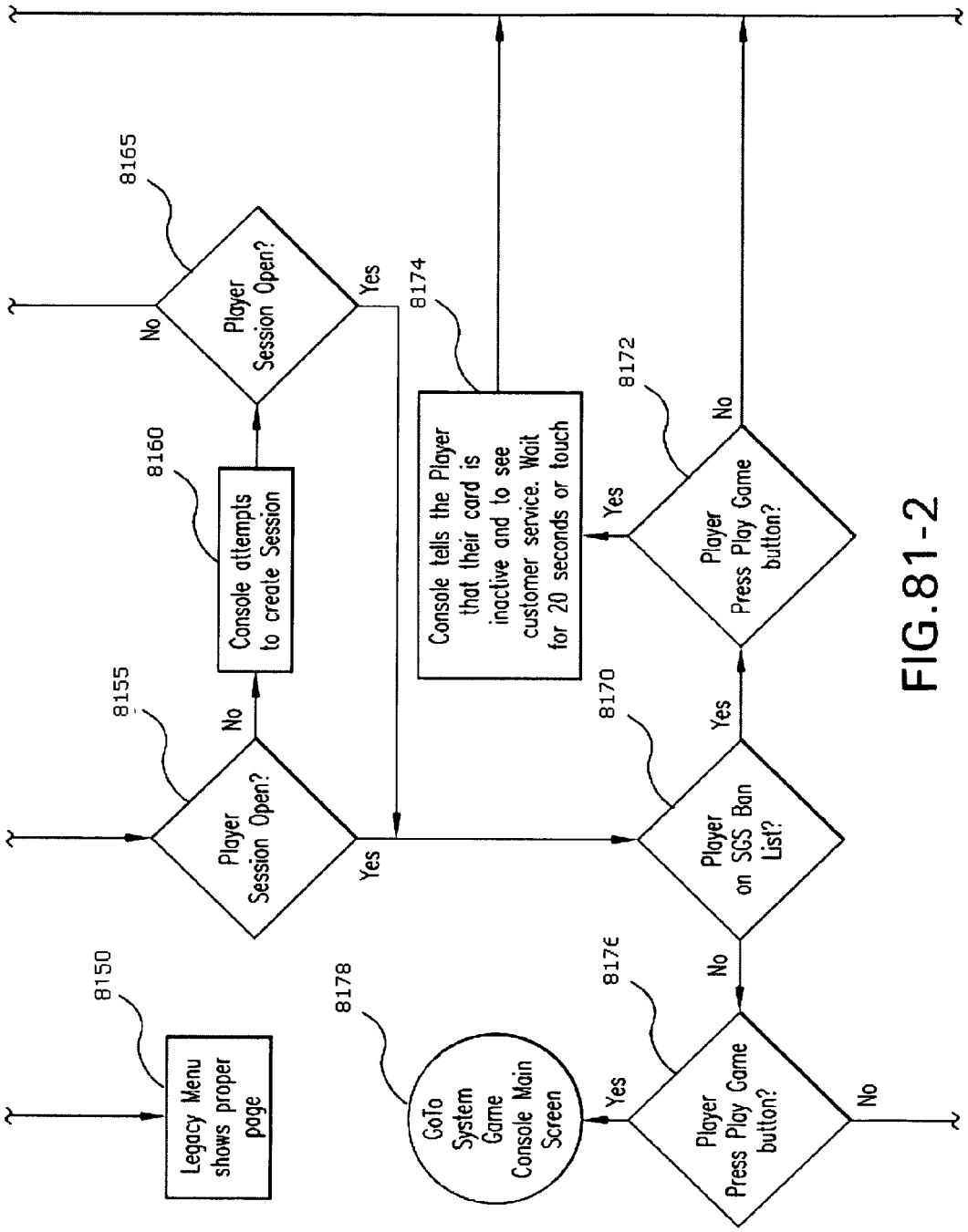

8150
Legacy Menu shows proper page
8155
Player Session Open?
No
Yes
8160
Console attempts to create Session
8165
Player Session Open?
No
Yes
8170
Player on SGS Ban List?
Yes
No
8172
Player Press Play Game button?
No
Yes
8174
Console tells the Player that their card is inactive and to see customer service. Wait for 20 seconds or touch
8176
Player Press Play Game button?
No
Yes
8178
GoTo System Game Console Main Screen

FIG.81-2

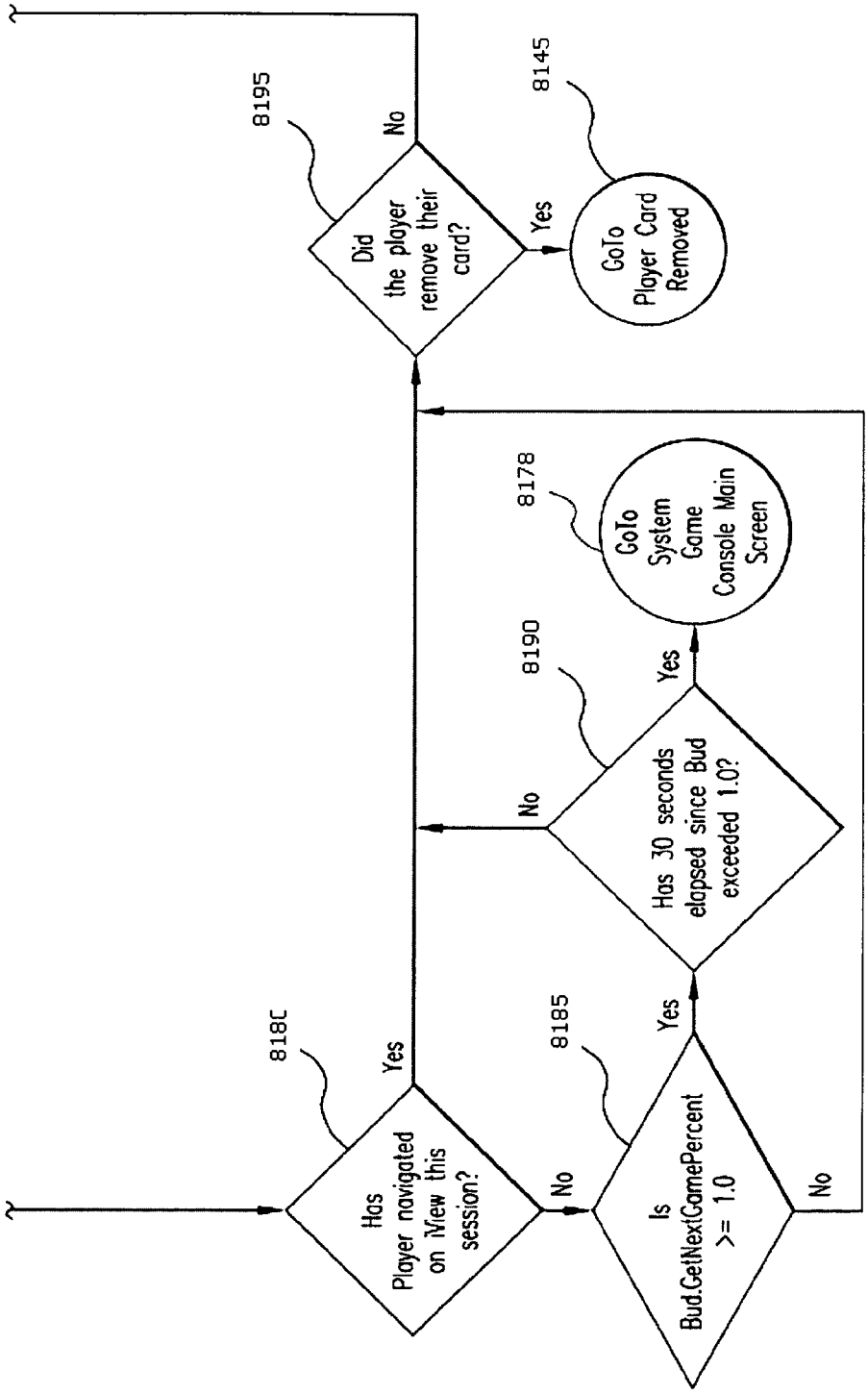

Has Player navigated on iView this session?
818C
Yes
No
Is Bud.GetNextGamePercent >= 1.0
8185
Yes
No
Has 30 seconds elapsed since Bud exceeded 1.0?
8190
Yes
No
GoTo System Game Console Main Screen
8178
Did the player remove their card?
8195
Yes
No
GoTo Player Card Removed
8145

FIG.81-3

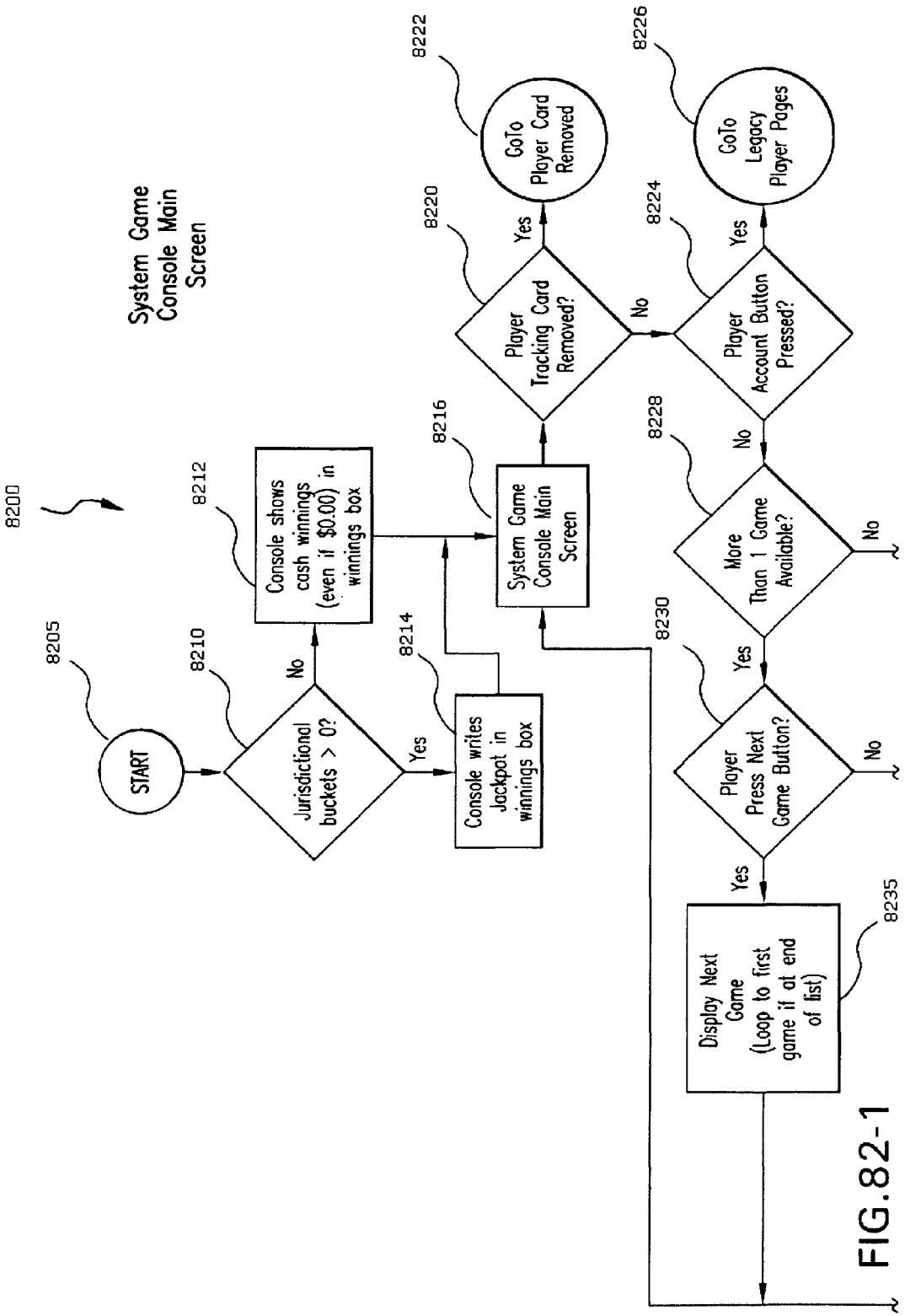

8200
System Game Console Main Screen
8205
START
8210
Jurisdictional buckets > 0?
No
Yes
8212
Console shows cash winnings (even if $0.00) in winnings box
8214
Console writes Jackpot in winnings box
8216
System Game Console Main Screen
8220
Player Tracking Card Removed?
Yes
No
8222
GoTo Player Card Removed
8224
Player Account Button Pressed?
Yes
No
8226
GoTo Legacy Player Pages
8228
More Than 1 Game Available?
No
Yes
8230
Player Press Next Game Button?
No
Yes
8235
Display Next Game (Loop to first game if at end of list)

FIG.82-1

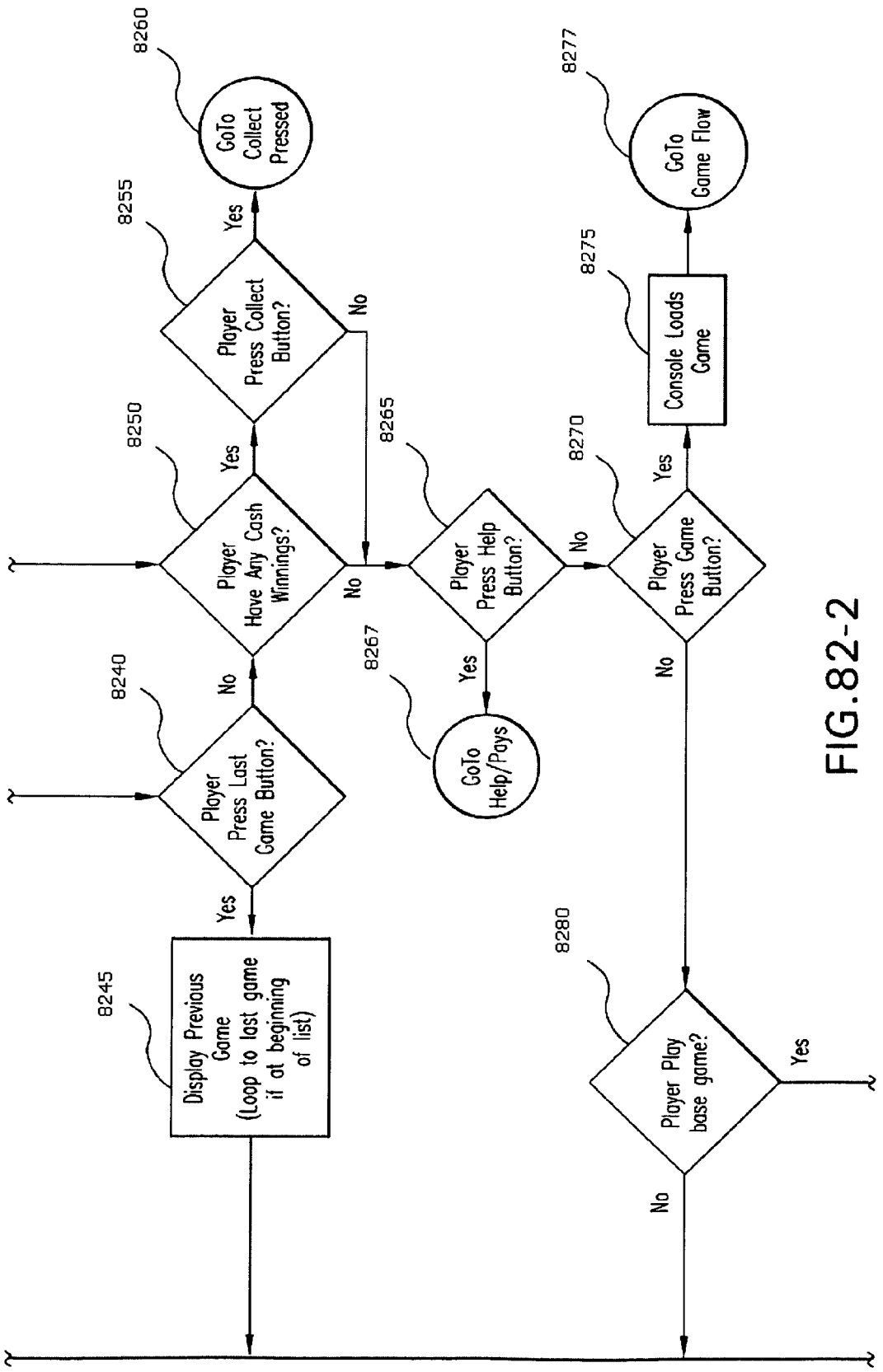

8260
GoTo Collect Pressed
8255
Player Press Collect Button?
Yes
No
8250
Player Have Any Cash Winnings?
Yes
No
8265
Player Press Help Button?
8267
GoTo Help/Pays
Yes
No
8270
Player Press Game Button?
Yes
No
8277
GoTo Game Flow
8275
Console Loads Game
8240
Player Press Last Game Button?
No
Yes
8245
Display Previous Game (Loop to last game if at beginning of list)
8280
Player Play base game?
Yes
No

FIG.82-2

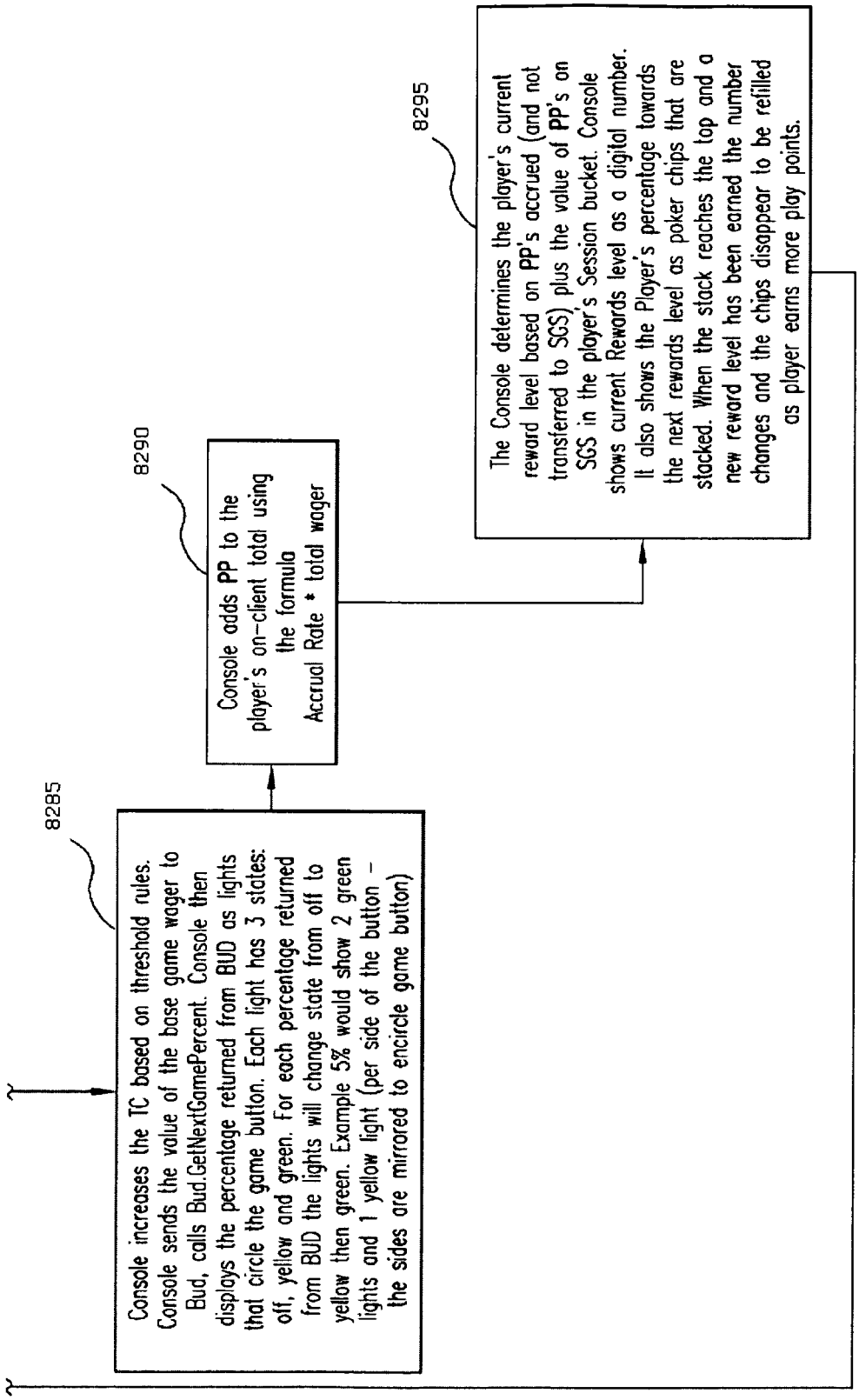

8285
Console increases the TC based on threshold rules. Console sends the value of the base game wager to Bud, calls Bud.GetNextGamePercent. Console then displays the percentage returned from BUD as lights that circle the game button. Each light has 3 states: off, yellow and green. For each percentage returned from BUD the lights will change state from off to yellow then green. Example 5% would show 2 green lights and 1 yellow light (per side of the button – the sides are mirrored to encircle game button)
8290
Console adds PP to the player's on-client total using the formula Accrual Rate * total wager
8295
The Console determines the player's current reward level based on PP's accrued (and not transferred to SGS) plus the value of PP's on SGS in the player's Session bucket. Console shows current Rewards level as a digital number. It also shows the Player's percentage towards the next rewards level as poker chips that are stacked. When the stack reaches the top and a new reward level has been earned the number changes and the chips disappear to be refilled as player earns more play points.

FIG.82-3

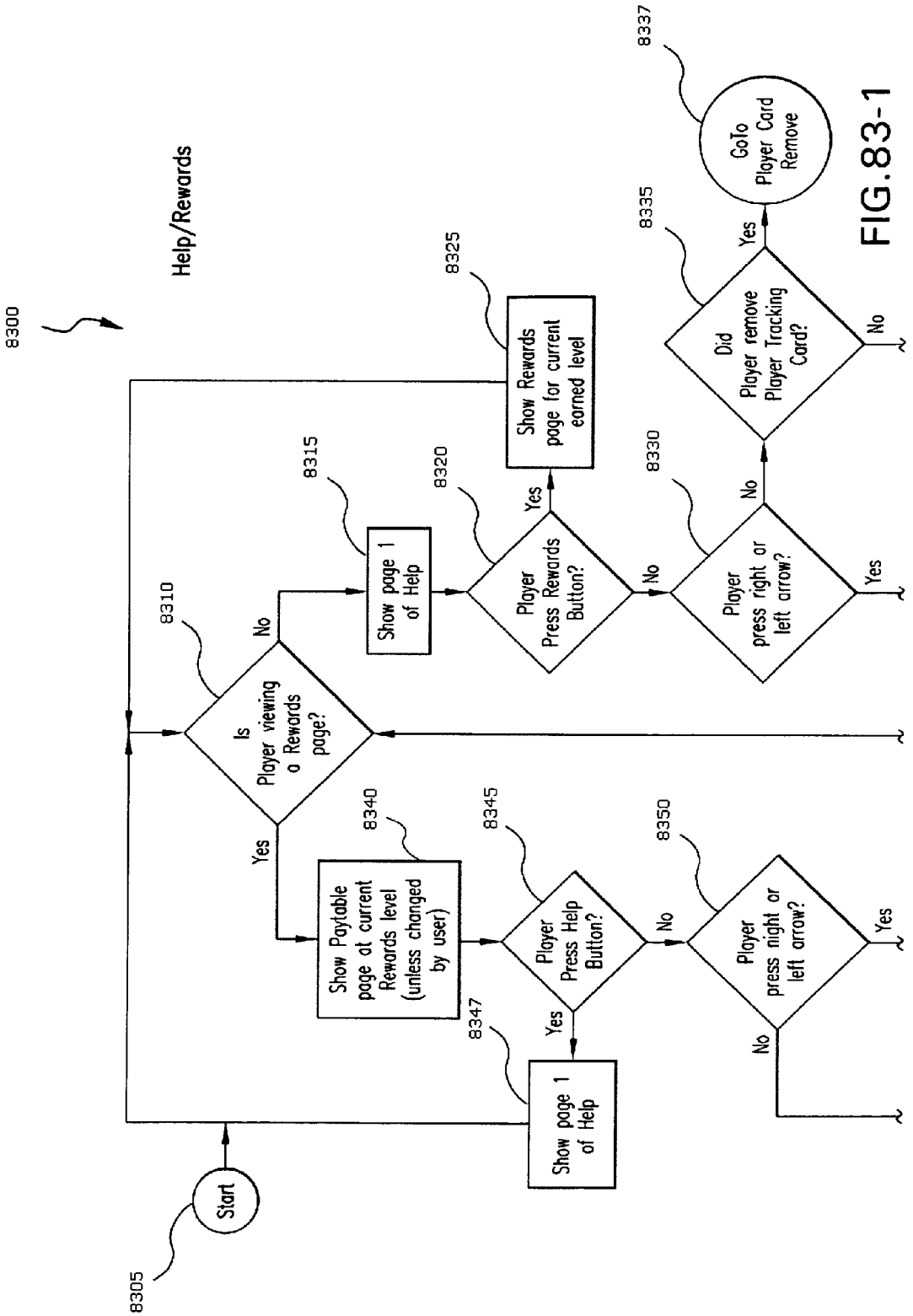

8300
Help/Rewards
8305
Start
8310
Is Player viewing a Rewards page?
No
Yes
8315
Show page 1 of Help
8320
Player Press Rewards Button?
Yes
No
8325
Show Rewards page for current earned level
8330
Player press right or left arrow?
No
Yes
8335
Did Player remove Player Tracking Card?
Yes
No
8337
GoTo Player Card Remove
8340
Show Paytable page at current Rewards level (unless changed by user)
8345
Player Press Help Button?
Yes
No
8347
Show page 1 of Help
8350
Player press right or left arrow?
Yes
No

FIG.83-1

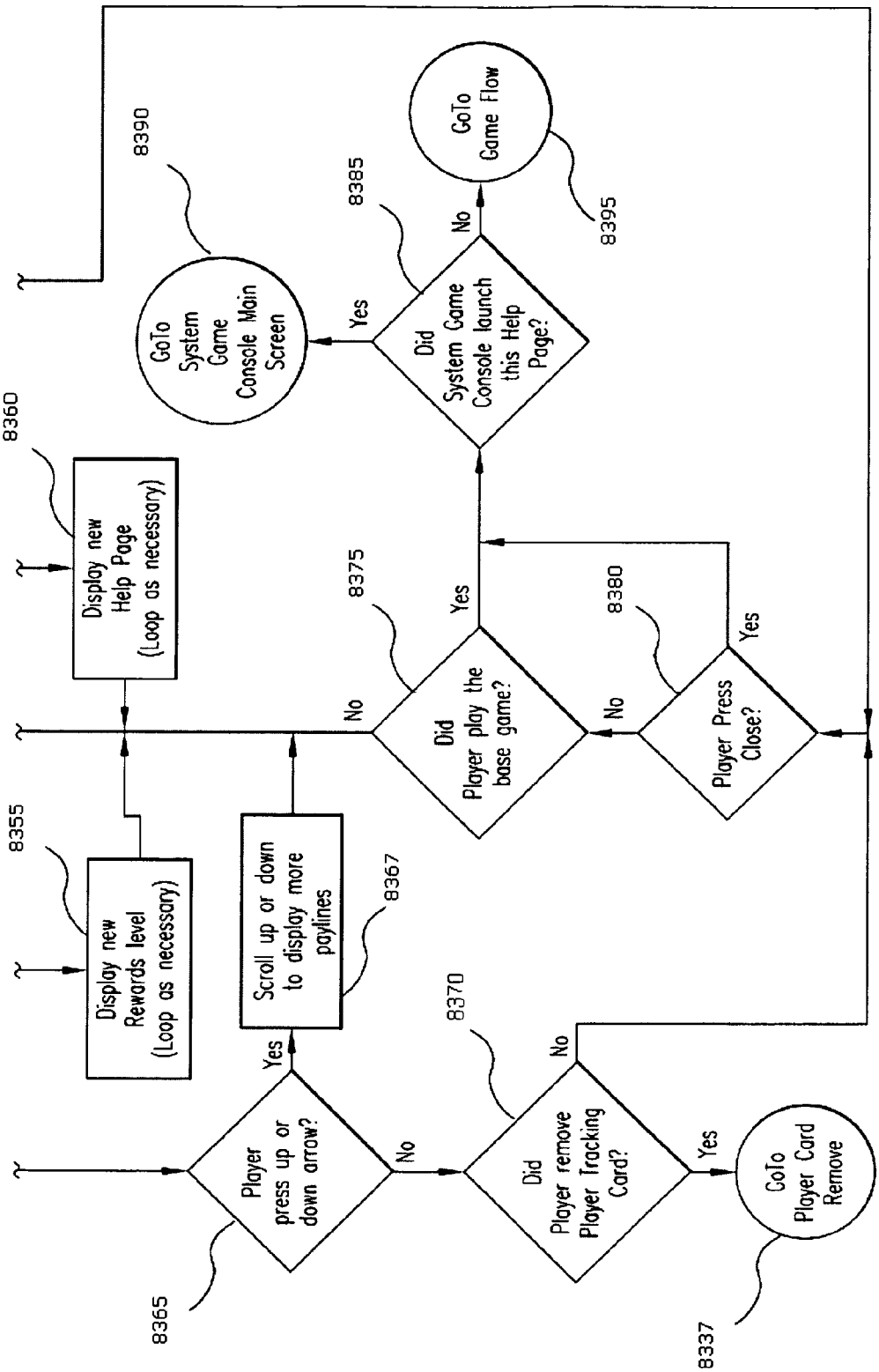

Player press up or down arrow?
8365
Yes
No
Scroll up or down to display more paylines
8367
Display new Rewards level (Loop as necessary)
8355
Did Player remove Player Tracking Card?
8370
No
Yes
GoTo Player Card Remove
8337
Did Player play the base game?
8375
No
Yes
Player Press Close?
8380
No
Yes
Display new Help Page (Loop as necessary)
8360
Did System Game Console launch this Help Page?
8385
Yes
No
GoTo System Game Console Main Screen
8390
GoTo Game Flow
8395

FIG.83-2

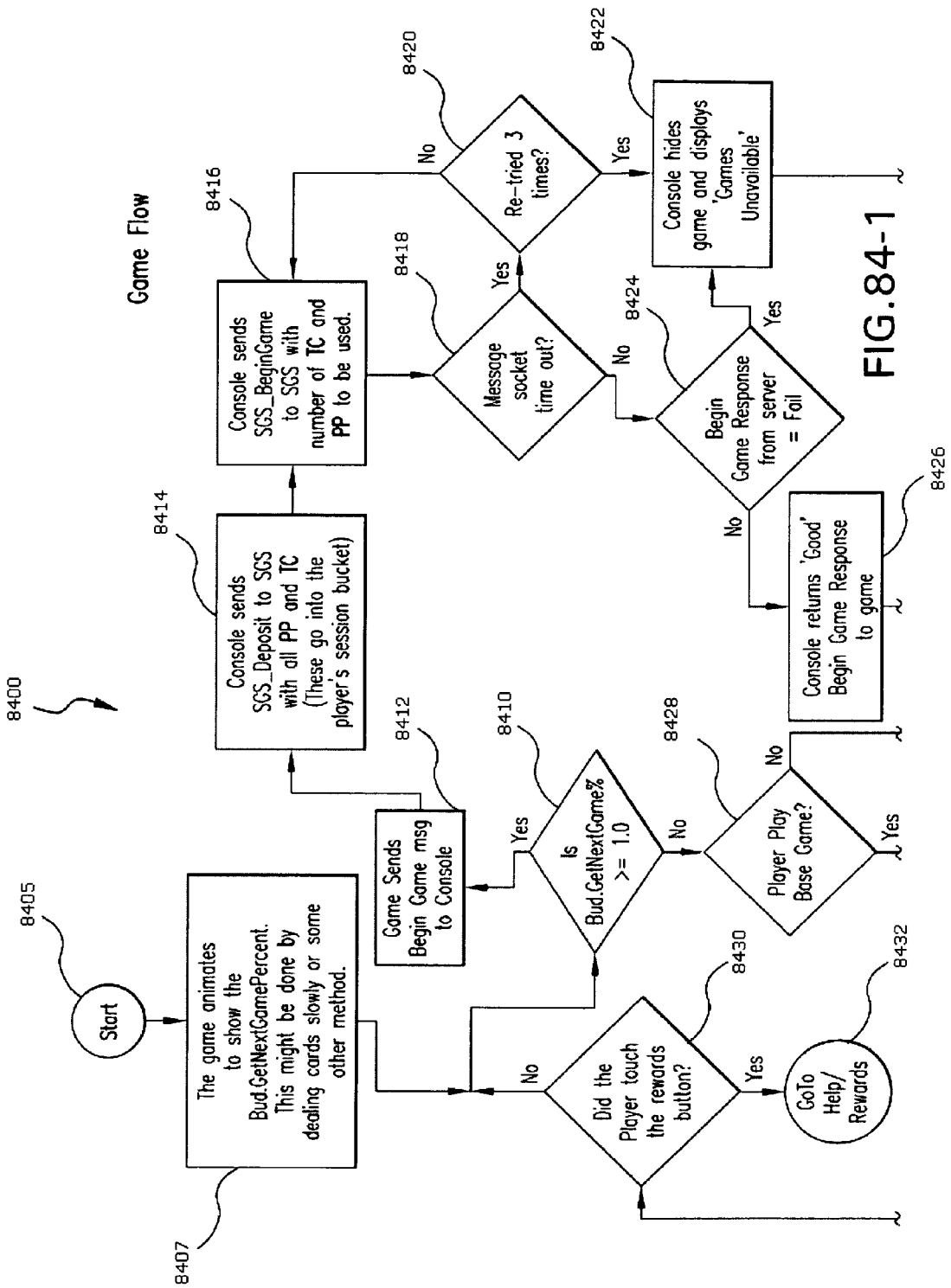

Game Flow
8400
Start
8405
The game animates to show the Bud.GetNextGamePercent. This might be done by dealing cards slowly or some other method.
8407
Game Sends Begin Game msg to Console
8412
Console sends SGS_Deposit to SGS with all PP and TC (These go into the player's session bucket)
8414
Console sends SGS_BeginGame to SGS with number of TC and PP to be used.
8416
Is Bud.GetNextGame% >= 1.0
8410
Yes
No
Message socket time out?
8418
Yes
No
Re-tried 3 times?
8420
No
Yes
Console hides game and displays 'Games Unavailable'
8422
Begin Game Response from server = Fail
8424
Yes
No
Console returns 'Good' Begin Game Response to game
8426
Player Play Base Game?
8428
No
Yes
Did the Player touch the rewards button?
8430
No
Yes
GoTo Help/ Rewards
8432

FIG.84-1

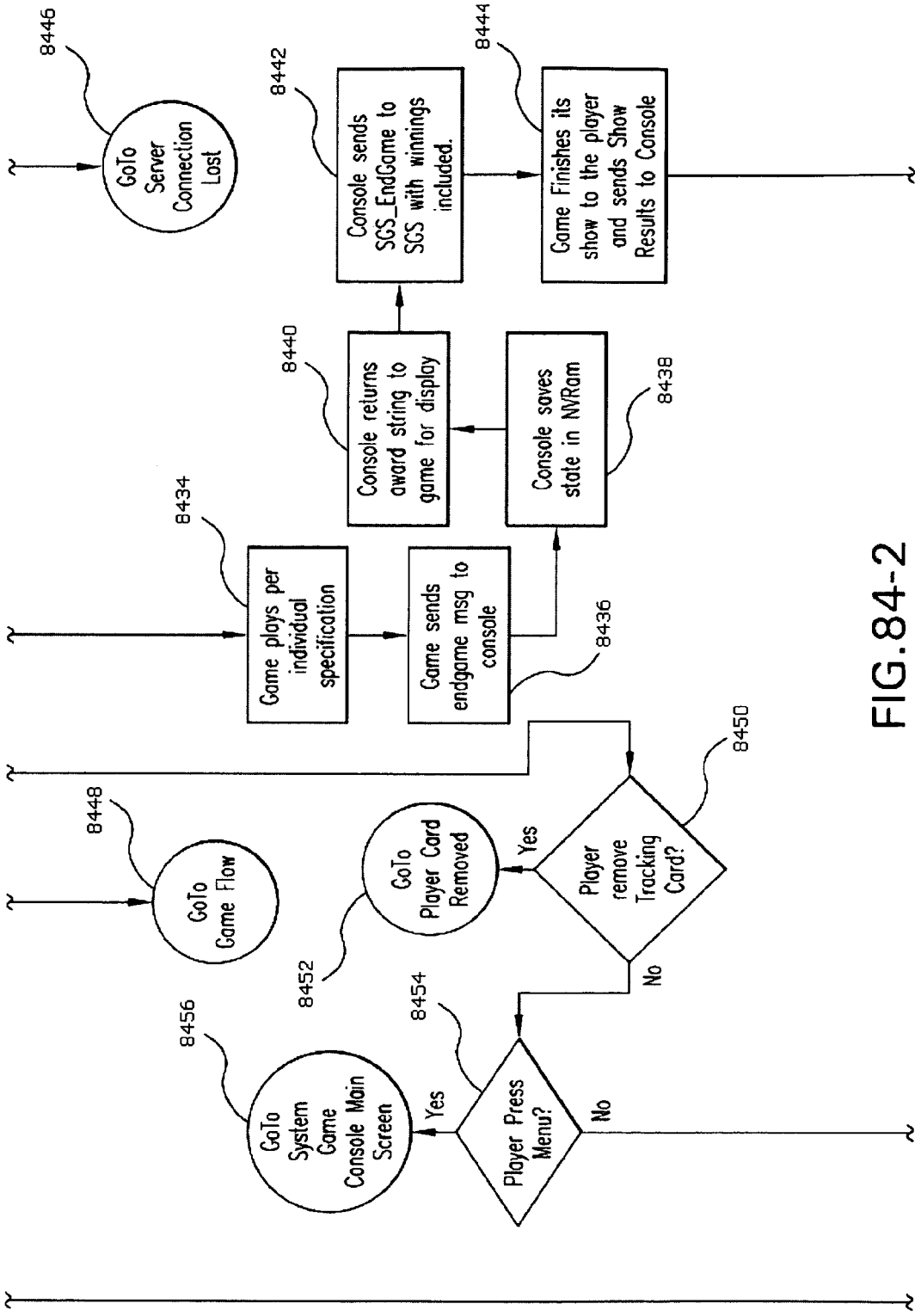

8446
GoTo Server Connection Lost
8442
Console sends SCS_EndGame to SCS with winnings included.
8444
Game Finishes its show to the player and sends Show Results to Console
8440
Console returns award string to game for display
Console saves state in NVRam
8438
8434
Game plays per individual specification
Game sends endgame msg to console
8436
8450
Player remove Tracking Card?
Yes
No
8448
GoTo Game Flow
GoTo Player Card Removed
8452
8454
Player Press Menu?
Yes
No
8456
GoTo System Game Console Main Screen

FIG.84-2

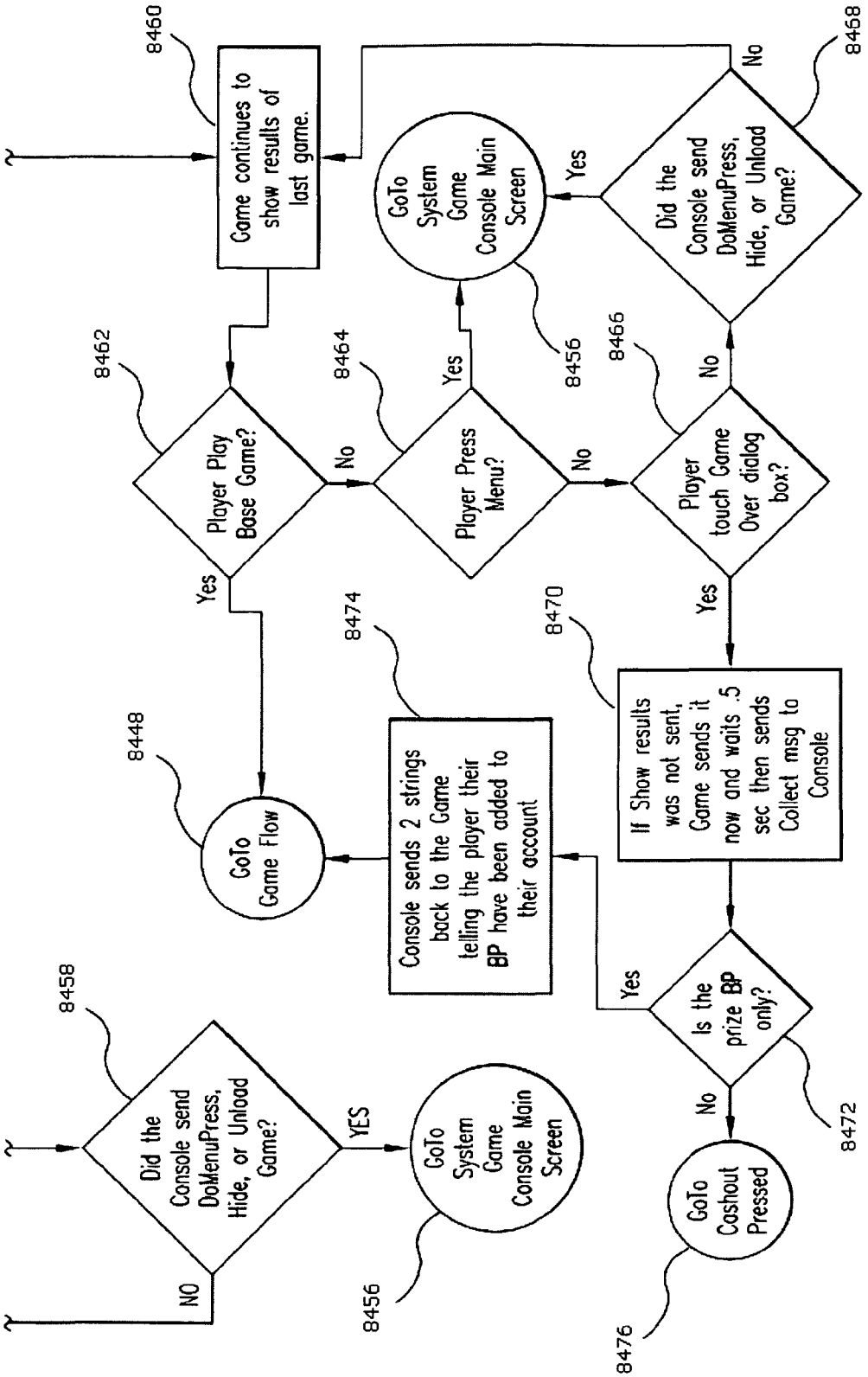

8460
Game continues to show results of last game.
8462
Player Play Base Game?
No
8464
Player Press Menu?
Yes
8456
GoTo System Game Console Main Screen
Yes
8468
Did the Console send DoMenuPress, Hide, or Unload Game?
No
8466
Player touch Game Over dialog box?
No
Yes
8470
If Show results was not sent, Game sends it now and waits .5 sec then sends Collect msg to Console
8472
Is the prize BP only?
No
8476
GoTo Cashout Pressed
Yes
8474
Console sends 2 strings back to the Game telling the player their BP have been added to their account
8448
GoTo Game Flow
Yes
8458
Did the Console send DoMenuPress, Hide, or Unload Game?
YES
8456
GoTo System Game Console Main Screen
NO

FIG.84-3

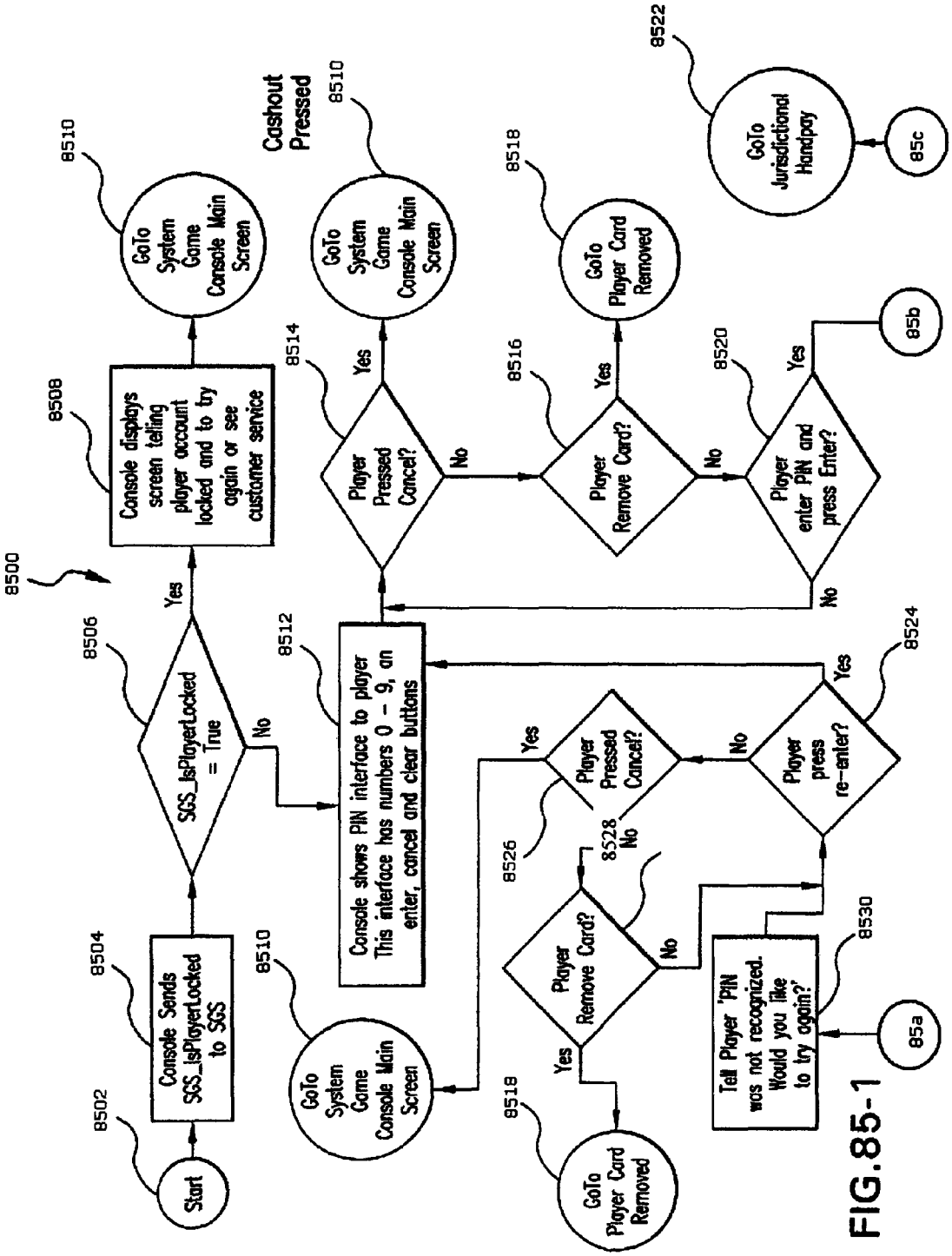

8500
8502
Start
8504
Console Sends SGS_IsPlayerLocked to SGS
8506
SGS_IsPlayerLocked = True
Yes
No
8508
Console displays screen telling player account locked and to try again or see customer service
8510
GoTo System Game Console Main Screen
Cashout Pressed
8510
GoTo System Game Console Main Screen
8512
Console shows PIN interface to player This interface has numbers 0 - 9, an enter, cancel and clear buttons
8514
Player Pressed Cancel?
Yes
No
8516
Player Remove Card?
Yes
No
8518
GoTo Player Card Removed
8520
Player enter PIN and press Enter?
Yes
No
8522
GoTo Jurisdictional Handpay
85c
85b
8524
Player press re-enter?
Yes
No
8526
Player Pressed Cancel?
Yes
No
8528
Player Remove Card?
Yes
No
8518
GoTo Player Card Removed
8530
Tell Player 'PIN was not recognized. Would you like to try again?'
85a
8510
GoTo System Game Console Main Screen

FIG.85-1

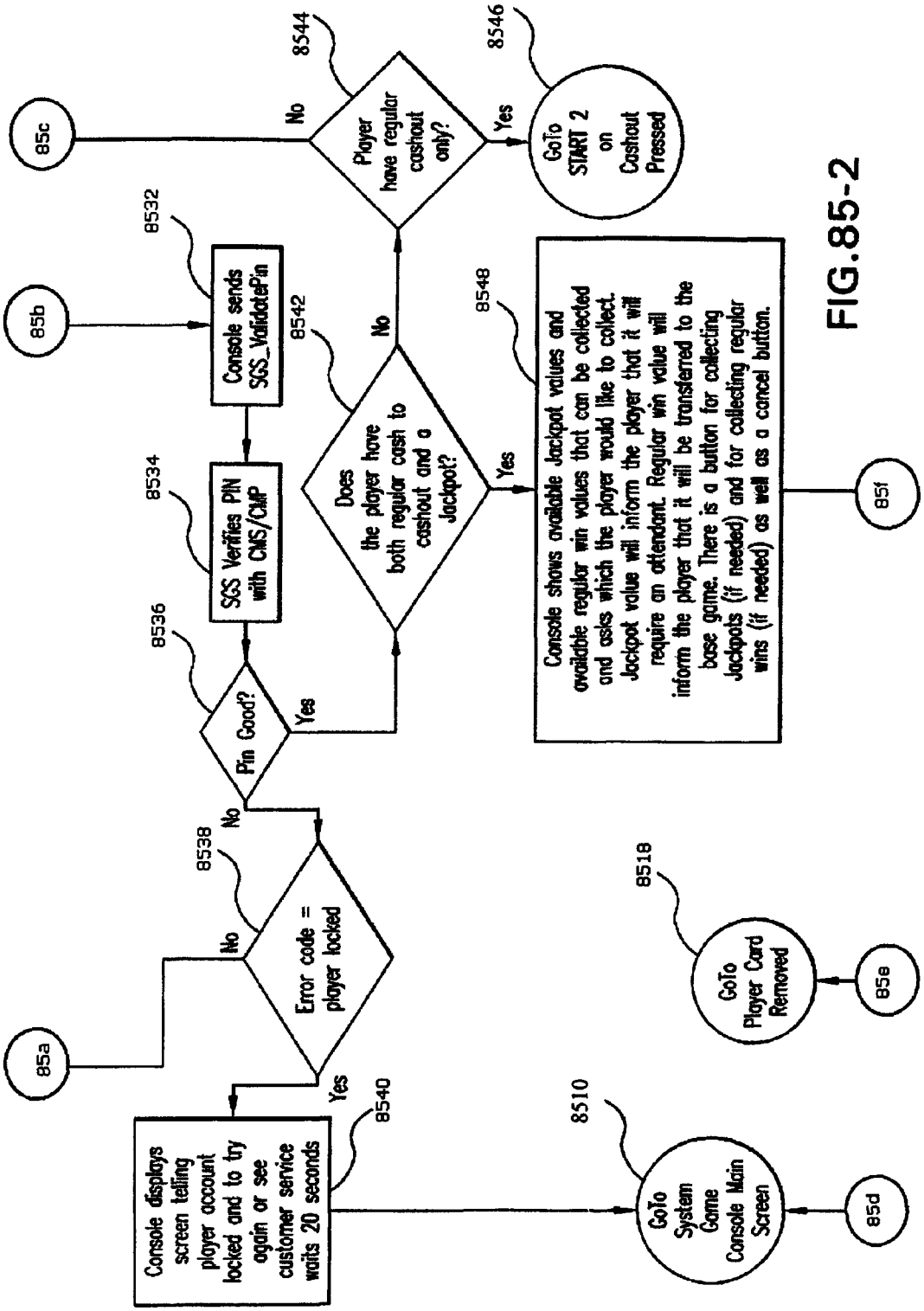

85c
No
8544
Player have regular cashout only?
Yes
8546
GoTo START 2 on Cashout Pressed
85b
8532
Console sends SGS_ValidatePin
8542
Does the player have both regular cash to cashout and a Jackpot?
No
Yes
8548
Console shows available Jackpot values and available regular win values that can be collected and asks which the player would like to collect. Jackpot value will inform the player that it will require an attendant. Regular win value will inform the player that it will be transferred to the base game. There is a button for collecting Jackpots (if needed) and for collecting regular wins (if needed) as well as a cancel button.
85f
8534
SGS Verifies PIN with CMS/CMP
8536
Pin Good?
Yes
No
8538
Error code = player locked
No
85a
Yes
8540
Console displays screen telling player account locked and to try again or see customer service waits 20 seconds
8510
GoTo System Game Console Main Screen
85d
8518
GoTo Player Card Removed
85e

FIG.85-2

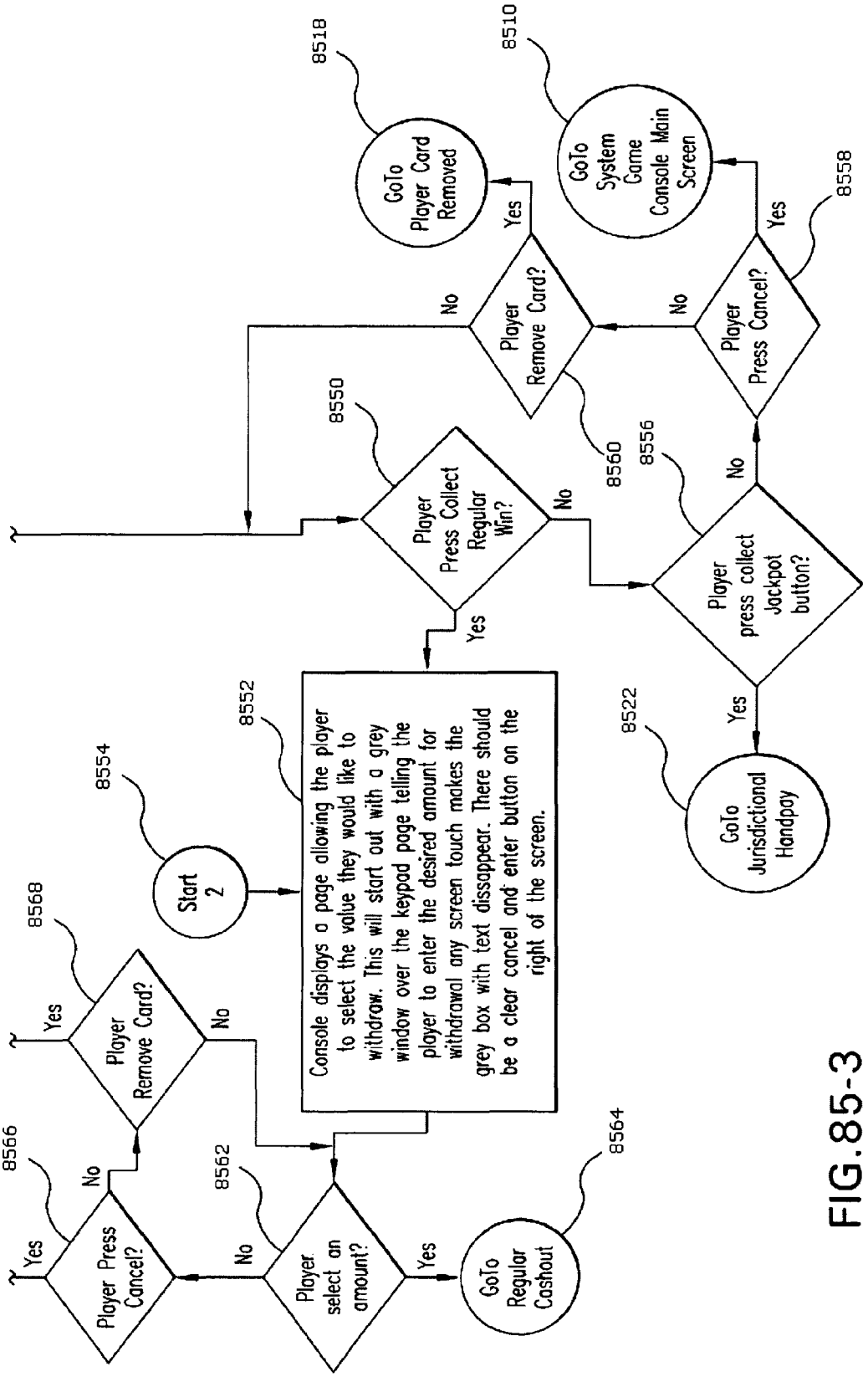

8518
GoTo Player Card Removed
8510
GoTo System Game Console Main Screen
Yes
Player Remove Card?
No
Player Press Cancel?
8558
Yes
No
8550
Player Press Collect Regular Win?
8560
8556
Player press collect Jackpot button?
No
Yes
Yes
8522
GoTo Jurisdictional Handpay
8554
Start 2
8552
Console displays a page allowing the player to select the value they would like to withdraw. This will start out with a grey window over the keypad page telling the player to enter the desired amount for withdrawal any screen touch makes the grey box with text dissappear. There should be a clear cancel and enter button on the right of the screen.
8568
Yes
Player Remove Card?
No
8566
Yes
Player Press Cancel?
No
8562
Player select an amount?
Yes
8564
GoTo Regular Cashout

FIG.85-3

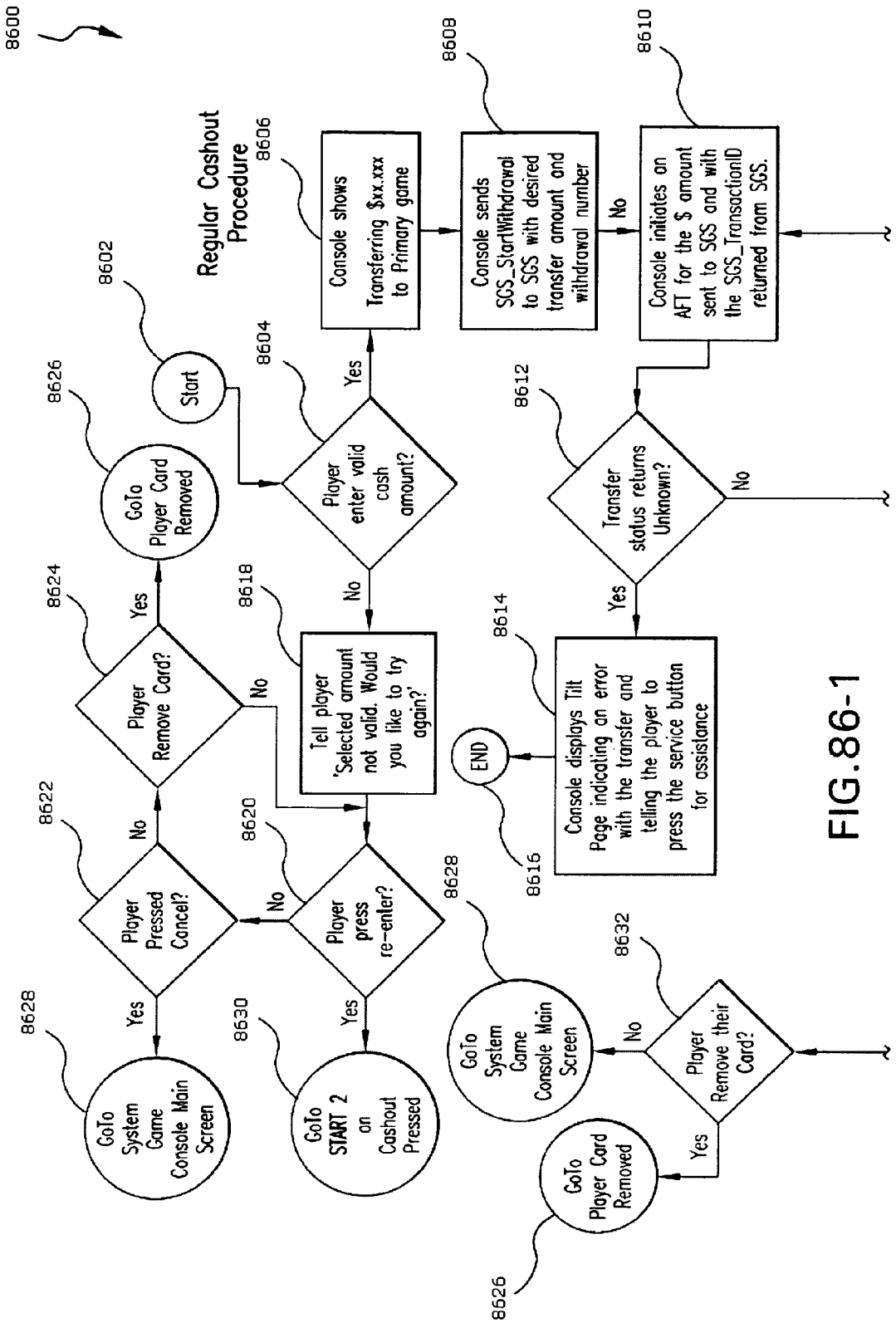

8600
Regular Cashout Procedure
8602
Start
8604
Player enter valid cash amount?
Yes
No
8606
Console shows Transferring $xx.xxx to Primary game
8608
Console sends SCS_StartWithdrawal to SCS with desired transfer amount and withdrawal number
8610
Console initiates an AFT for the $ amount sent to SCS and with the SCS_TransactionID returned from SCS.
8612
Transfer status returns Unknown?
Yes
No
8614
Console displays Tilt Page indicating an error with the transfer and telling the player to press the service button for assistance
8616
END
8618
Tell player 'Selected amount not valid. Would you like to try again?'
8620
Player press re-enter?
Yes
No
8622
Player Pressed Cancel?
Yes
No
8624
Player Remove Card?
Yes
No
8626
GoTo Player Card Removed
8628
GoTo System Game Console Main Screen
8630
GoTo START 2 on Cashout Pressed
8632
Player Remove their Card?
Yes
No
8626
GoTo Player Card Removed
8628
GoTo System Game Console Main Screen

FIG.86-1

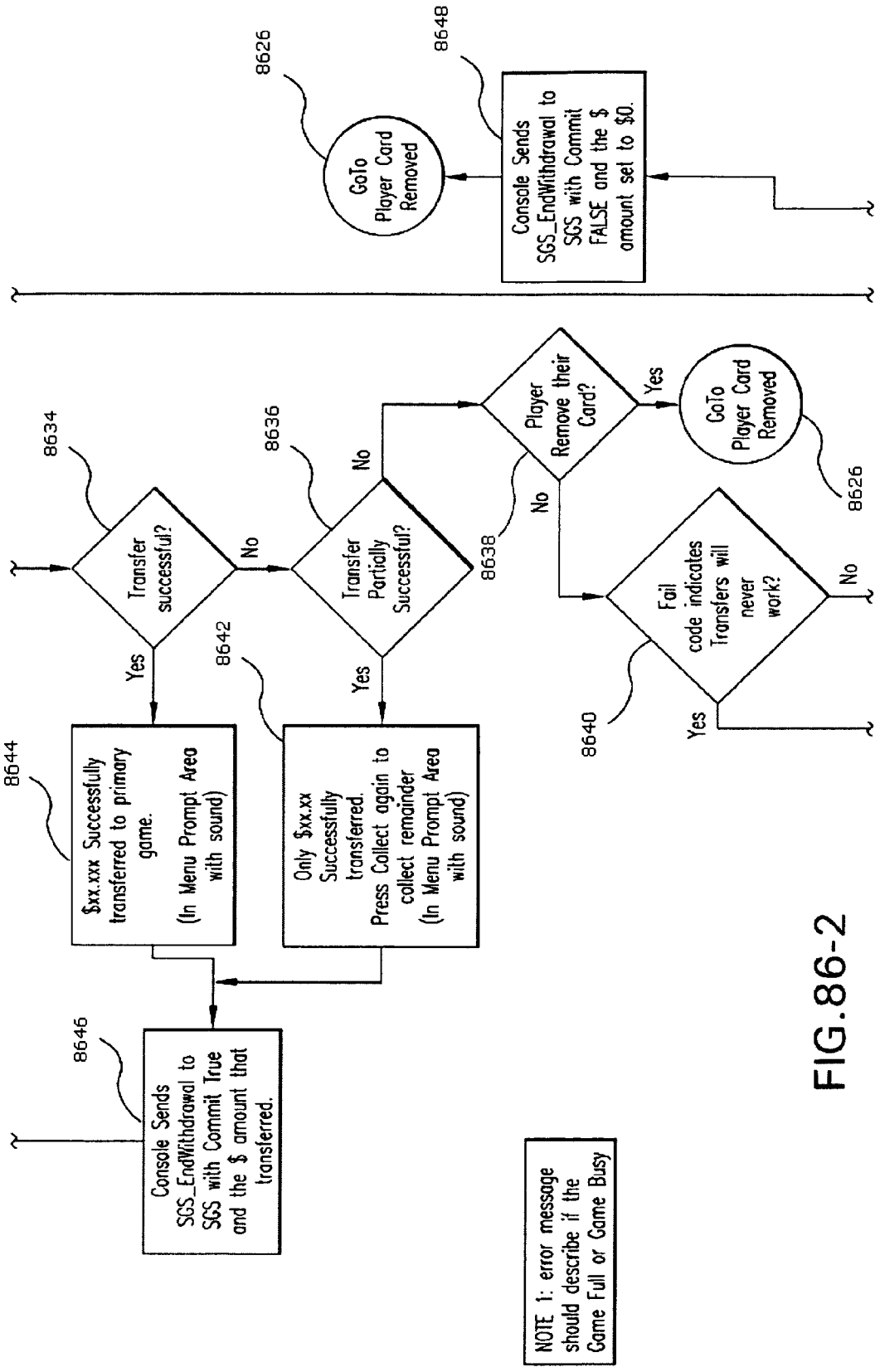

8626
GoTo Player Card Removed
8648
Console Sends SGS_EndWithdrawal to SGS with Commit FALSE and the $ amount set to $0.
8634
Transfer successful?
No
8636
Transfer Partially Successful?
No
Player Remove their Card?
Yes
GoTo Player Card Removed
8626
8638
No
Fail code indicates Transfers will never work?
No
Yes
8640
Yes
Yes
8642
8644
$xx.xxx Successfully transferred to primary game. (In Menu Prompt Area with sound)
Only $xx.xx Successfully transferred. Press Collect again to collect remainder (In Menu Prompt Area with sound)
8646
Console Sends SGS_EndWithdrawal to SGS with Commit True and the $ amount that transferred.
NOTE 1: error message should describe if the Game Full or Game Busy

FIG.86-2

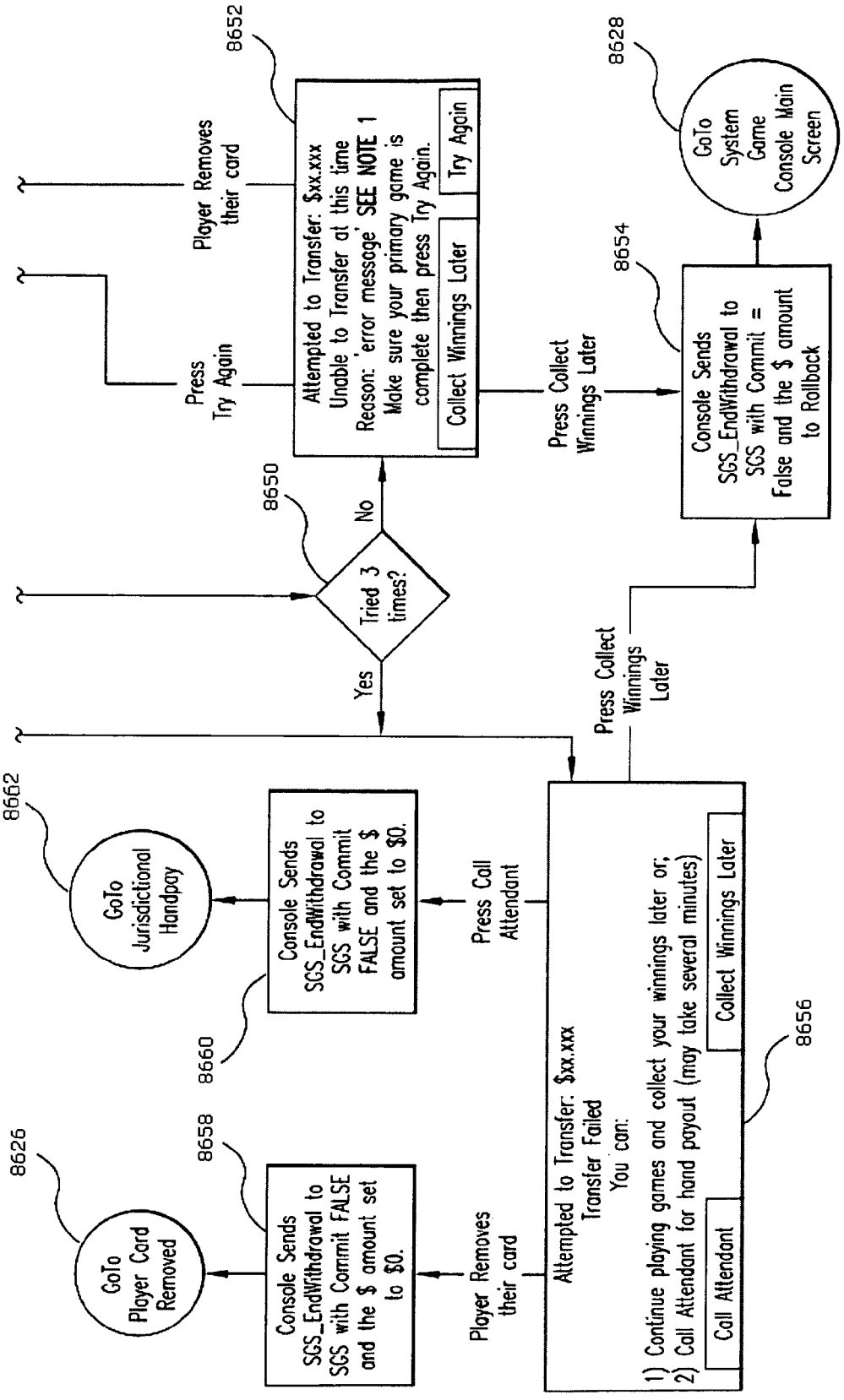

8652
Player Removes their card
Press Try Again
Attempted to Transfer: $xx.xxx
Unable to Transfer at this time
Reason: 'error message' SEE NOTE 1
Make sure your primary game is complete then press Try Again.
Collect Winnings Later
Try Again
8650
Tried 3 times?
No
Yes
8628
GoTo System Game Console Main Screen
8654
Press Collect Winnings Later
Console Sends SGS_EndWithdrawal to SGS with Commit = False and the $ amount to Rollback
Press Collect Winnings Later
8662
GoTo Jurisdictional Handpay
Console Sends SGS_EndWithdrawal to SGS with Commit FALSE and the $ amount set to $0.
8660
Press Call Attendant
8626
GoTo Player Card Removed
8658
Console Sends SGS_EndWithdrawal to SGS with Commit FALSE and the $ amount set to $0.
Player Removes their card
Attempted to Transfer: $xx.xxx
Transfer Failed
You can:
1) Continue playing games and collect your winnings later or;
2) Call Attendant for hand payout (may take several minutes)
Call Attendant
Collect Winnings Later
8656

FIG.86-3

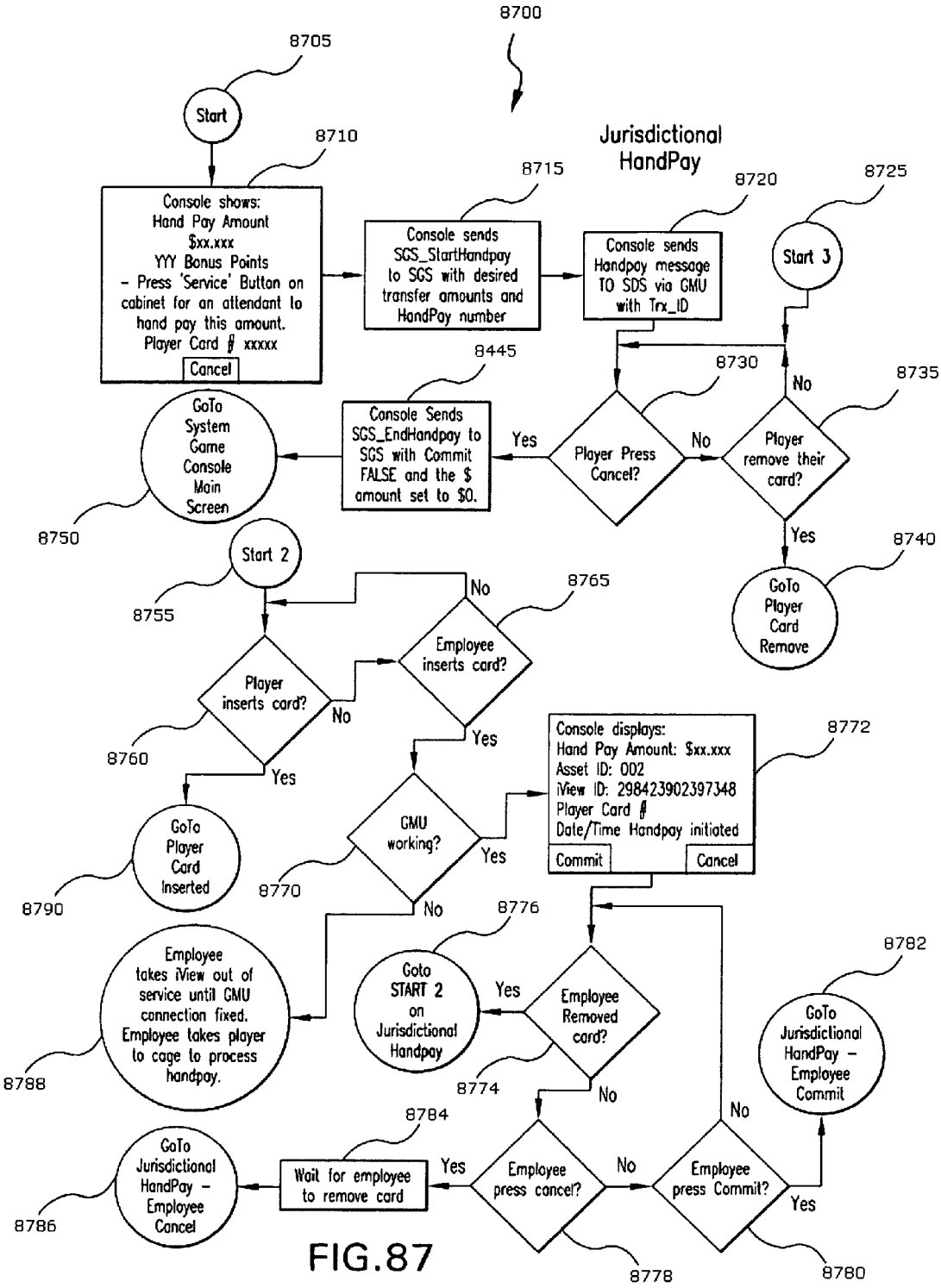

8700
Jurisdictional HandPay
8705
Start
8710
Console shows:
Hand Pay Amount
$xx.xxx
YYY Bonus Points
- Press 'Service' Button on cabinet for an attendant to hand pay this amount.
Player Card # xxxxx
Cancel
8715
Console sends SGS_StartHandpay to SGS with desired transfer amounts and HandPay number
8720
Console sends Handpay message TO SDS via GMU with Trx_ID
8725
Start 3
8730
Player Press Cancel?
Yes
No
8735
Player remove their card?
No
Yes
8740
GoTo Player Card Remove
8445
Console Sends SGS_EndHandpay to SGS with Commit FALSE and the $ amount set to $0.
8750
GoTo System Game Console Main Screen
8755
Start 2
8760
Player inserts card?
No
Yes
8765
Employee inserts card?
No
Yes
8770
GMU working?
Yes
No
8772
Console displays:
Hand Pay Amount: $xx.xxx
Asset ID: 002
iView ID: 298423902397348
Player Card #
Date/Time Handpay initiated
Commit
Cancel
8776
Goto START 2 on Jurisdictional Handpay
Yes
8774
Employee Removed card?
No
8782
GoTo Jurisdictional HandPay - Employee Commit
No
Yes
8778
Employee press cancel?
No
Yes
8780
Employee press Commit?
Yes
No
8784
Wait for employee to remove card
8786
GoTo Jurisdictional HandPay - Employee Cancel
8788
Employee takes iView out of service until GMU connection fixed. Employee takes player to cage to process handpay.
8790
GoTo Player Card Inserted

FIG.87

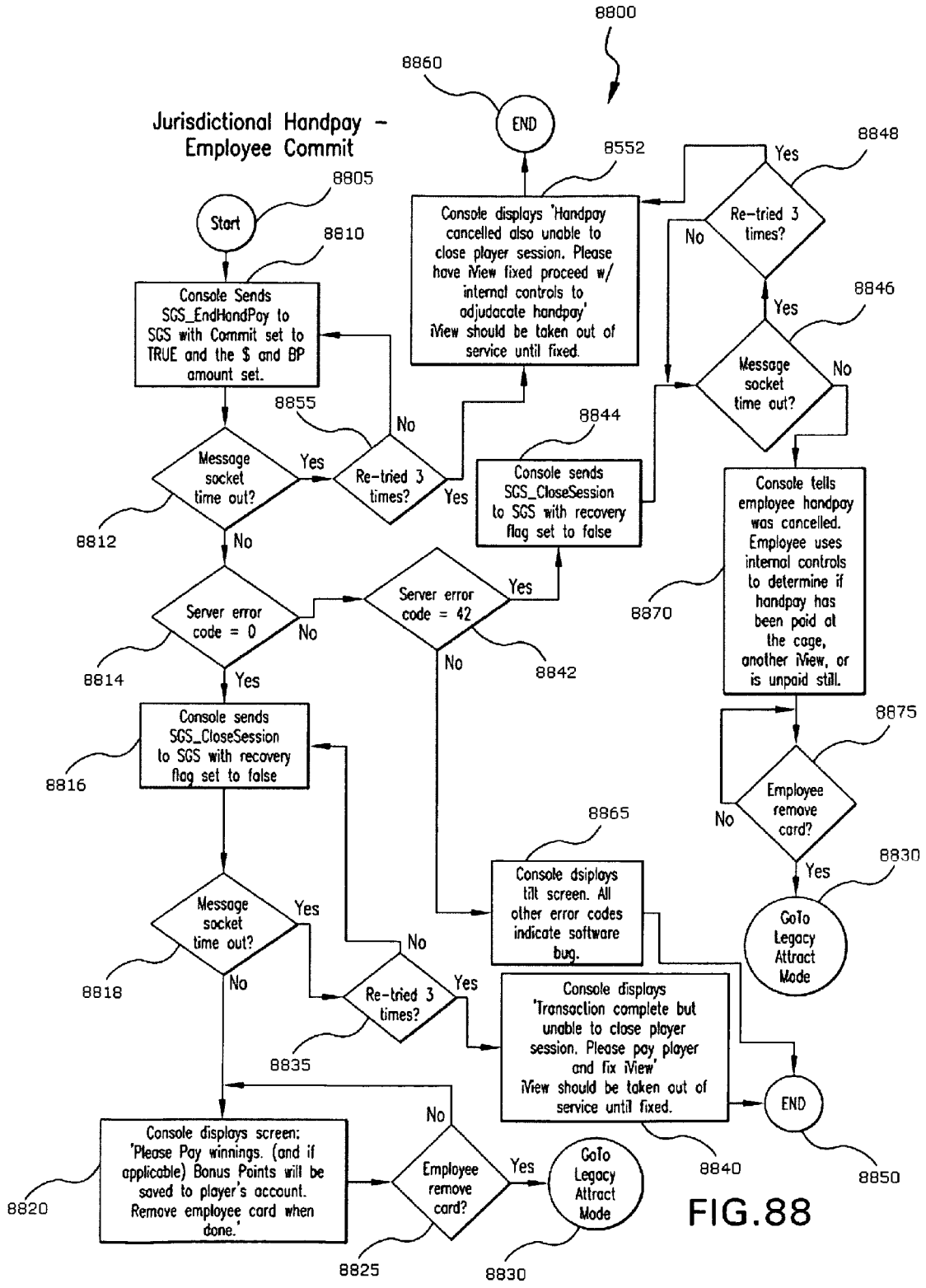

Jurisdictional Handpay - Employee Commit
8800
8805
Start
8810
Console Sends SGS_EndHandPay to SGS with Commit set to TRUE and the $ and BP amount set.
8812
Message socket time out?
Yes
No
8855
Re-tried 3 times?
No
Yes
8814
Server error code = 0
No
Yes
8816
Console sends SGS_CloseSession to SGS with recovery flag set to false
8818
Message socket time out?
Yes
No
8835
Re-tried 3 times?
Yes
No
8820
Console displays screen: 'Please Pay winnings. (and if applicable) Bonus Points will be saved to player's account. Remove employee card when done.'
8825
Employee remove card?
No
Yes
8830
GoTo Legacy Attract Mode
8842
Server error code = 42
Yes
No
8844
Console sends SGS_CloseSession to SGS with recovery flag set to false
8552
Console displays 'Handpay cancelled also unable to close player session. Please have iView fixed proceed w/ internal controls to adjudicate handpay' iView should be taken out of service until fixed.
8860
END
8848
Re-tried 3 times?
Yes
No
8846
Message socket time out?
Yes
No
8870
Console tells employee handpay was cancelled. Employee uses internal controls to determine if handpay has been paid at the cage, another iView, or is unpaid still.
8875
Employee remove card?
No
Yes
8830
GoTo Legacy Attract Mode
8865
Console dsiplays tilt screen. All other error codes indicate software bug.
Console displays 'Transaction complete but unable to close player session. Please pay player and fix iView' iView should be taken out of service until fixed.
8840
END
8850

FIG.88

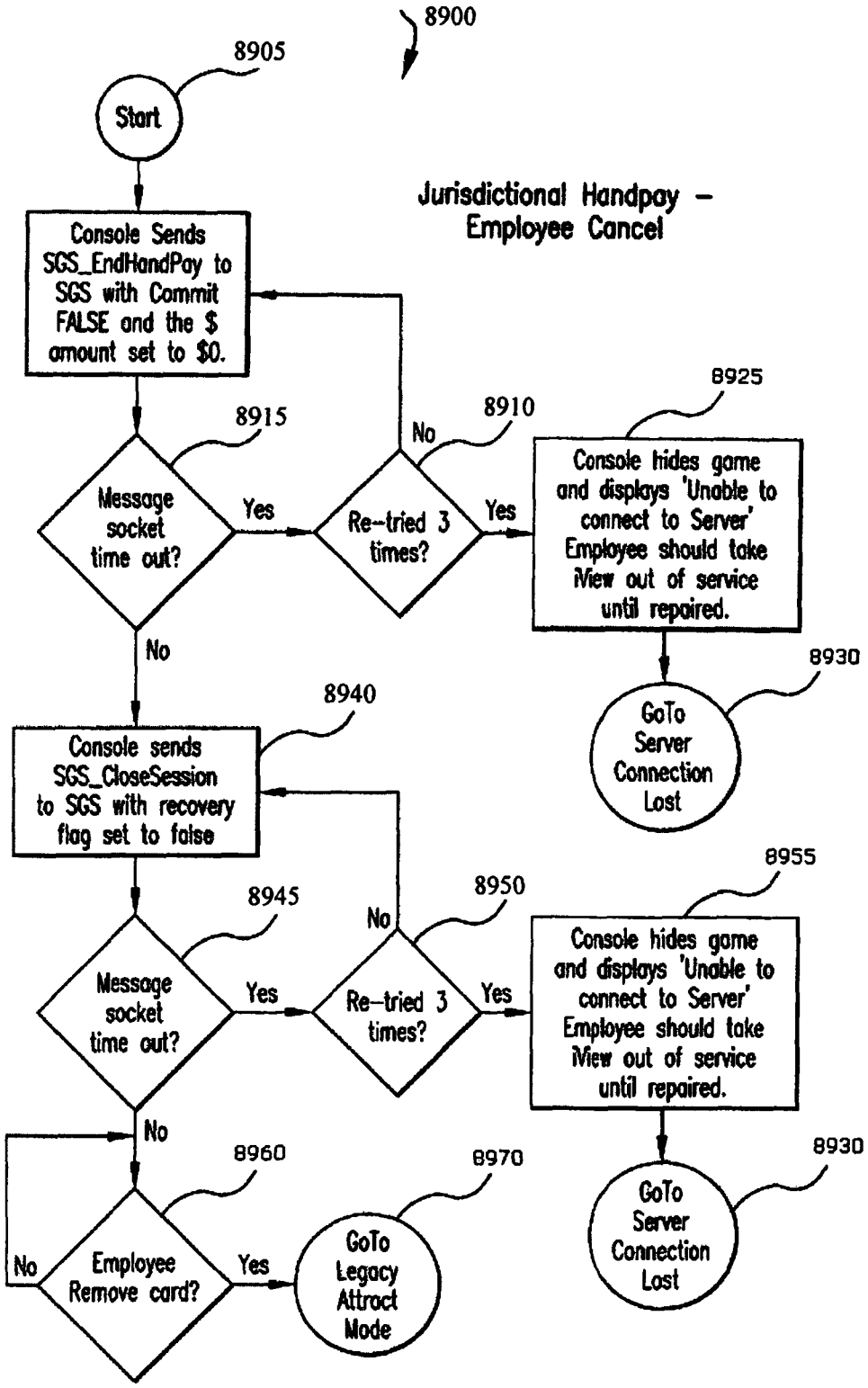

8900
8905
Start
Jurisdictional Handpay - Employee Cancel
Console Sends SGS_EndHandPay to SGS with Commit FALSE and the $ amount set to $0.
8915
Message socket time out?
Yes
No
8910
Re-tried 3 times?
Yes
No
8925
Console hides game and displays 'Unable to connect to Server' Employee should take iView out of service until repaired.
8930
GoTo Server Connection Lost
8940
Console sends SGS_CloseSession to SGS with recovery flag set to false
8945
Message socket time out?
Yes
No
8950
Re-tried 3 times?
Yes
No
8955
Console hides game and displays 'Unable to connect to Server' Employee should take iView out of service until repaired.
8930
GoTo Server Connection Lost
8960
Employee Remove card?
Yes
No
8970
GoTo Legacy Attract Mode

FIG.89

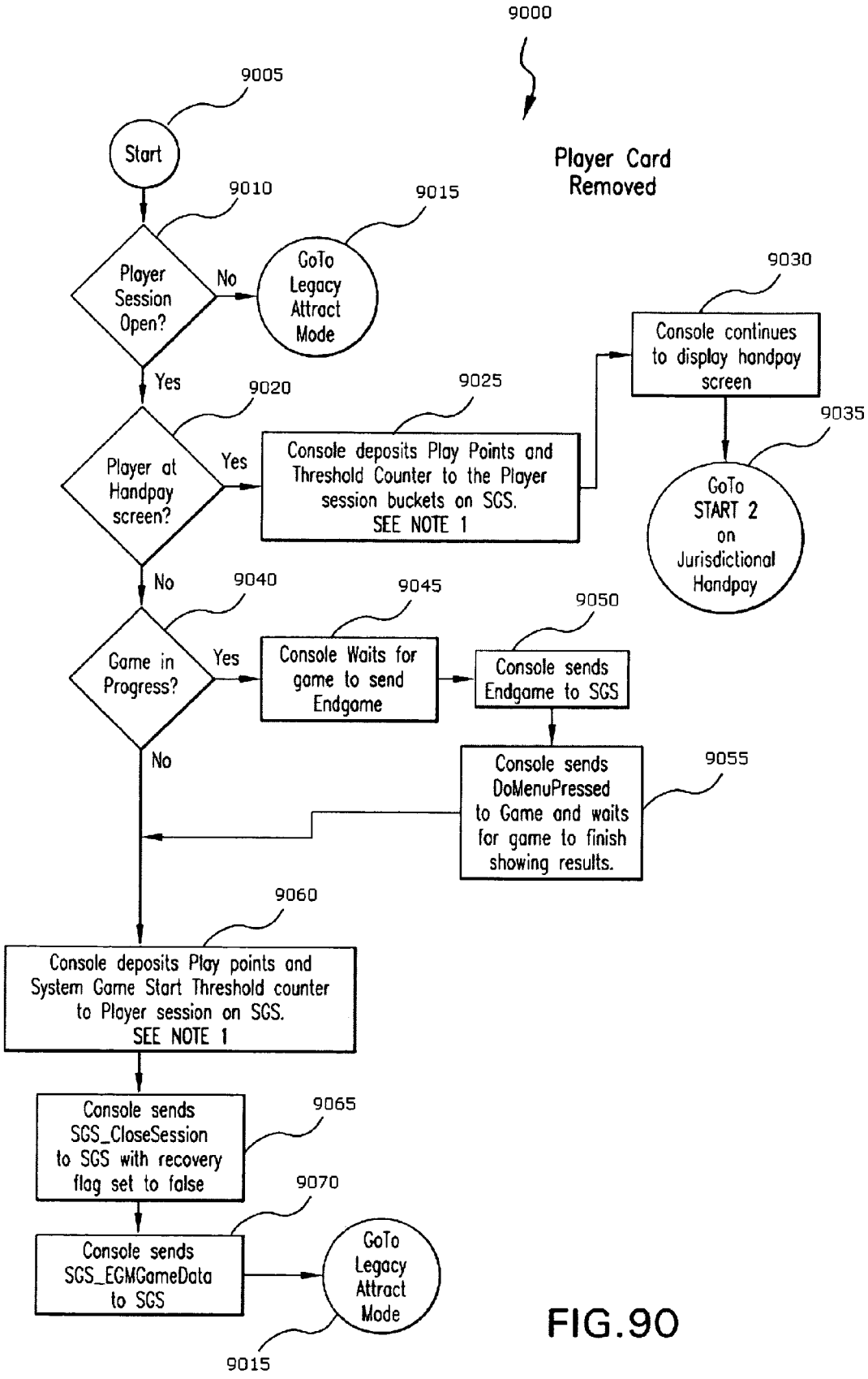

9000
Player Card Removed
9005
Start
9010
Player Session Open?
No
9015
GoTo Legacy Attract Mode
Yes
9020
Player at Handpay screen?
Yes
9025
Console deposits Play Points and Threshold Counter to the Player session buckets on SGS. SEE NOTE 1
9030
Console continues to display handpay screen
9035
GoTo START 2 on Jurisdictional Handpay
No
9040
Game in Progress?
Yes
9045
Console Waits for game to send Endgame
9050
Console sends Endgame to SGS
9055
Console sends DoMenuPressed to Game and waits for game to finish showing results.
No
9060
Console deposits Play points and System Game Start Threshold counter to Player session on SGS. SEE NOTE 1
9065
Console sends SGS_CloseSession to SGS with recovery flag set to false
9070
Console sends SGS_EGMGameData to SGS
GoTo Legacy Attract Mode
9015

FIG.90

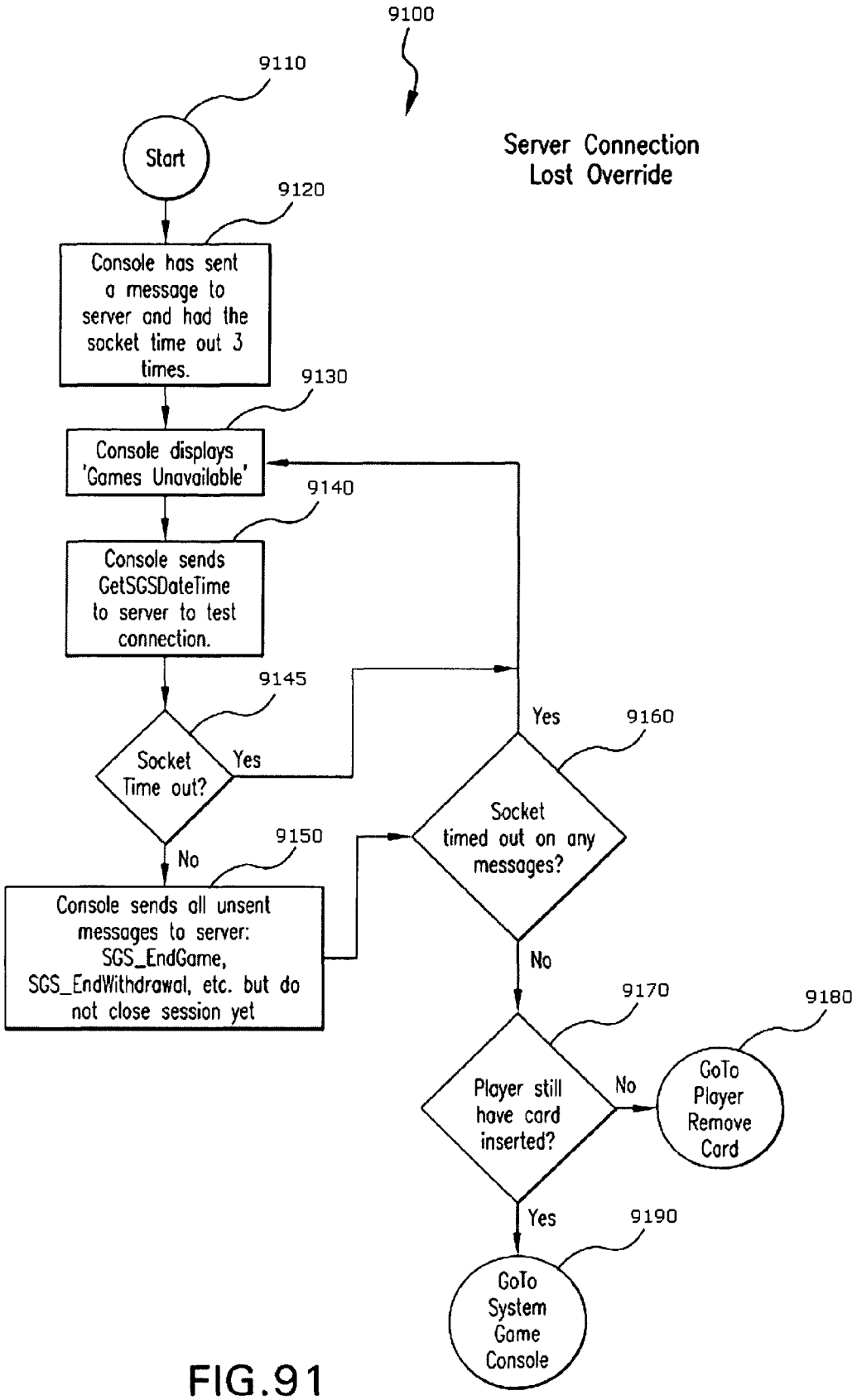

9100
Server Connection Lost Override
9110
Start
9120
Console has sent a message to server and had the socket time out 3 times.
9130
Console displays 'Games Unavailable'
9140
Console sends GetSGSDateTime to server to test connection.
9145
Socket Time out?
Yes
No
9150
Console sends all unsent messages to server: SGS_EndGame, SGS_EndWithdrawal, etc. but do not close session yet
9160
Socket timed out on any messages?
Yes
No
9170
Player still have card inserted?
No
9180
GoTo Player Remove Card
Yes
9190
GoTo System Game Console

FIG.91

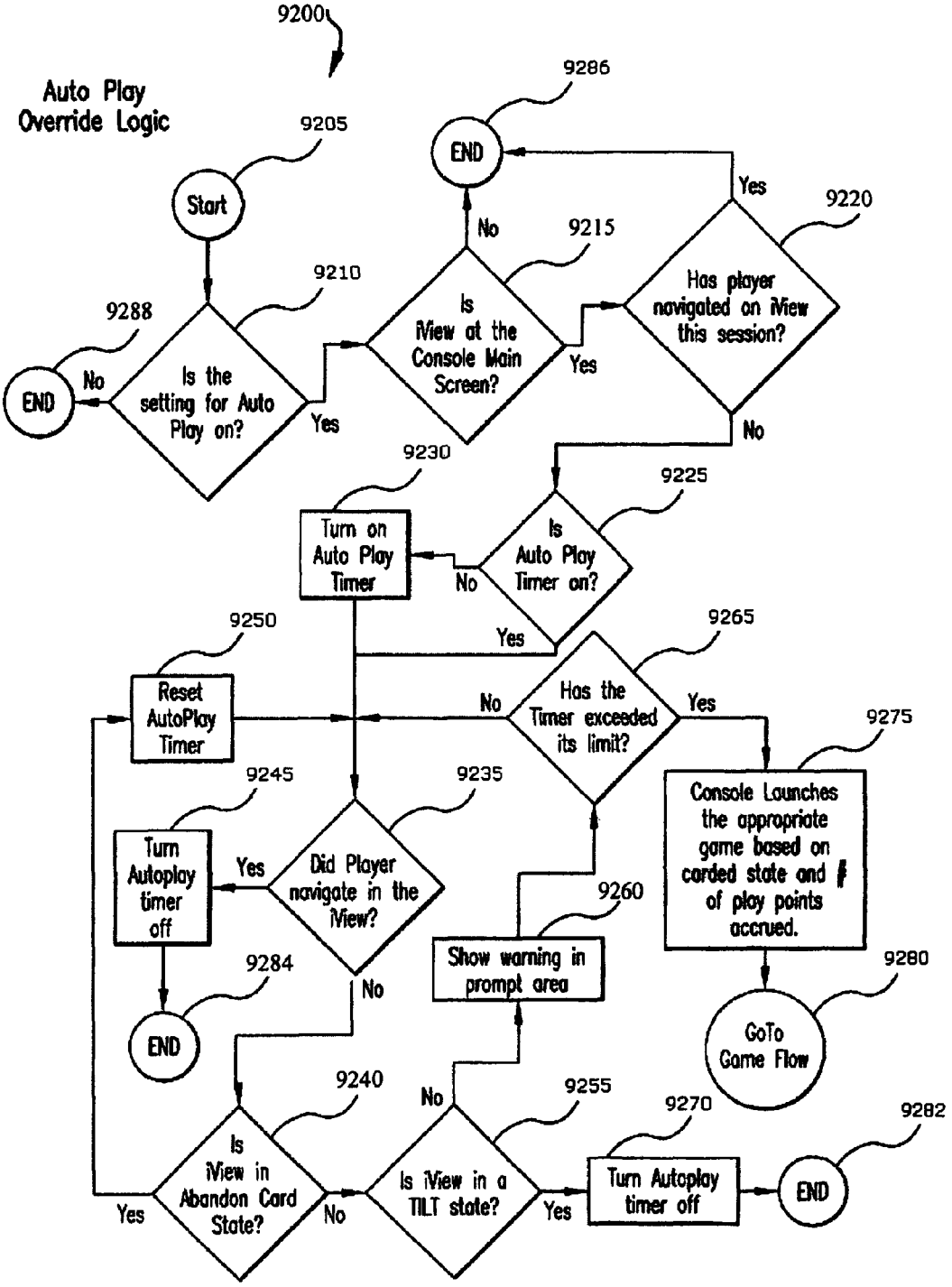

9200
Auto Play Override Logic
9205
Start
9210
Is the setting for Auto Play on?
No
9288
END
Yes
Is iView at the Console Main Screen?
No
9215
Yes
END
9286
Has player navigated on iView this session?
Yes
9220
No
9225
Is Auto Play Timer on?
No
9230
Turn on Auto Play Timer
Yes
9250
Reset AutoPlay Timer
9265
Has the Timer exceeded its limit?
No
Yes
9275
Console Launches the appropriate game based on carded state and # of play points accrued.
9280
GoTo Game Flow
9235
Did Player navigate in the iView?
Yes
9245
Turn Autoplay timer off
9284
END
No
9260
Show warning in prompt area
No
9240
Is iView in Abandon Card State?
Yes
No
9255
Is iView in a TILT state?
Yes
9270
Turn Autoplay timer off
9282
END

FIG.92

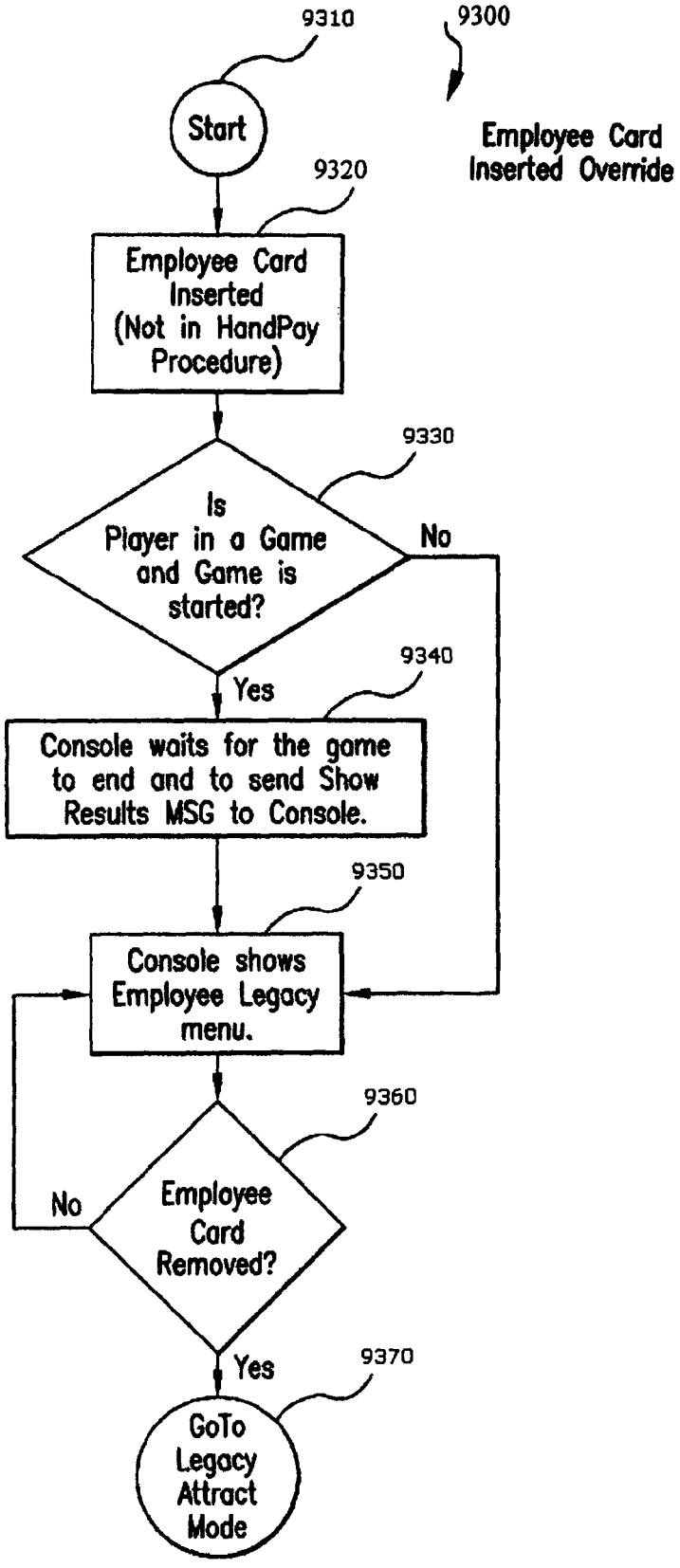

9310
9300
Start
Employee Card Inserted Override
9320
Employee Card Inserted (Not in HandPay Procedure)
9330
Is Player in a Game and Game is started?
No
Yes
9340
Console waits for the game to end and to send Show Results MSG to Console.
9350
Console shows Employee Legacy menu.
9360
Employee Card Removed?
No
Yes
9370
GoTo Legacy Attract Mode

FIG.93

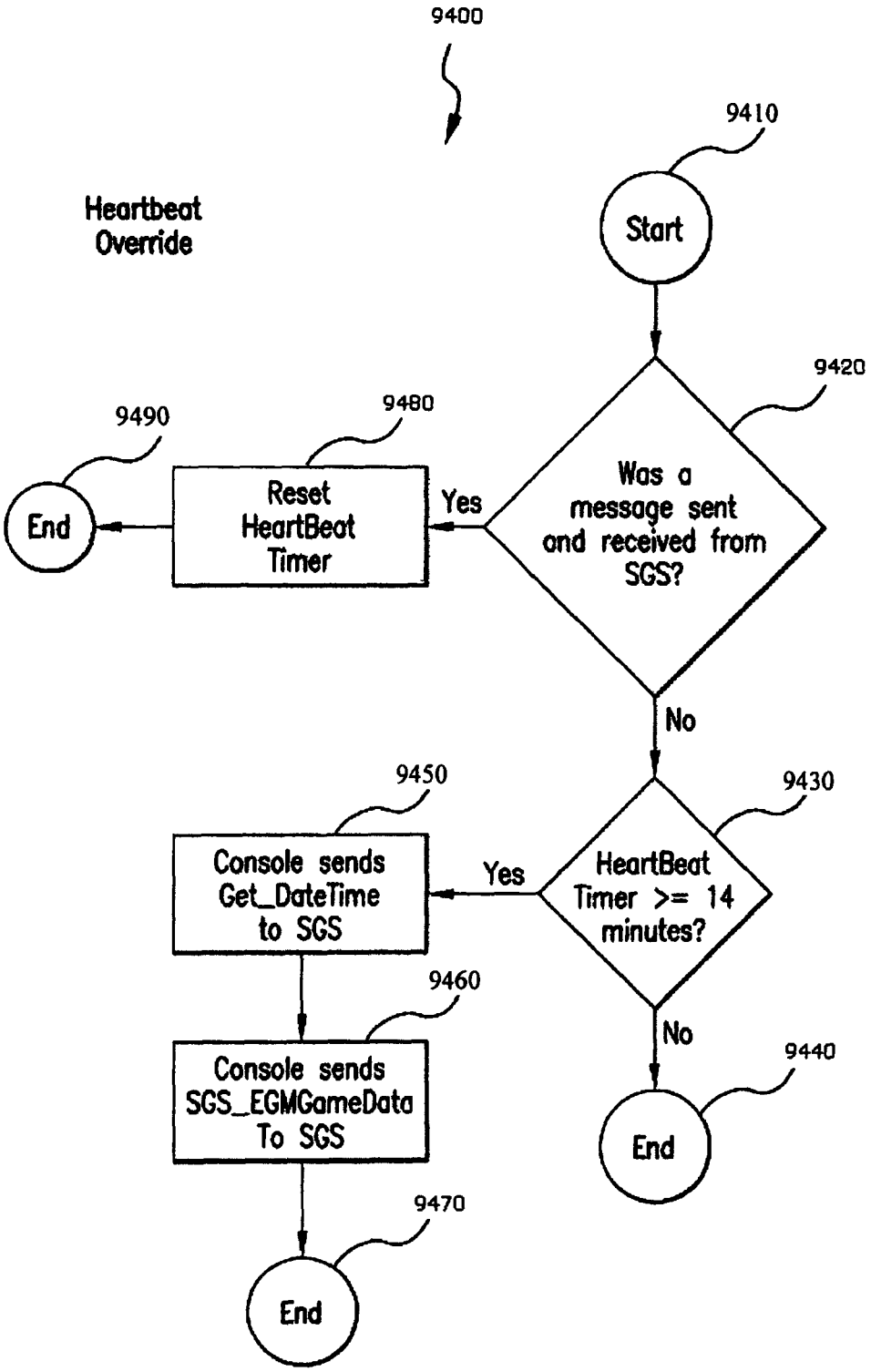

9400
Heartbeat Override
9410
Start
9420
Was a message sent and received from SGS?
Yes
9480
Reset HeartBeat Timer
9490
End
No
9430
HeartBeat Timer >= 14 minutes?
Yes
9450
Console sends Get_DateTime to SGS
9460
Console sends SGS_EGMGameData To SGS
9470
End
No
9440
End

FIG.94

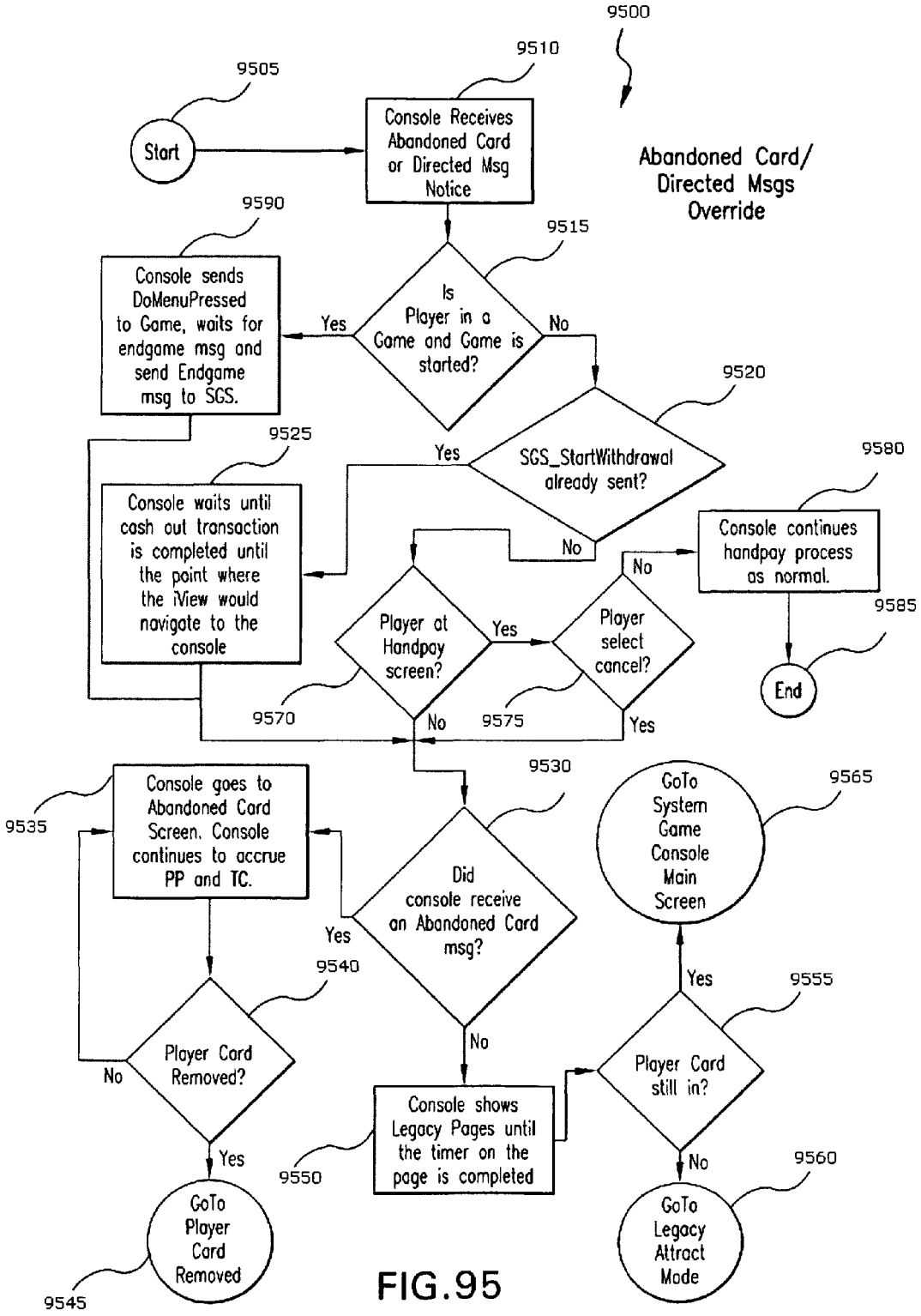

9500
Abandoned Card/
Directed Msgs
Override
9505
Start
9510
Console Receives Abandoned Card or Directed Msg Notice
9515
Is Player in a Game and Game is started?
Yes
No
9590
Console sends DoMenuPressed to Game, waits for endgame msg and send Endgame msg to SGS.
9520
SGS_StartWithdrawal already sent?
Yes
No
9525
Console waits until cash out transaction is completed until the point where the iView would navigate to the console
9580
Console continues handpay process as normal.
9585
End
Player at Handpay screen?
Yes
No
9570
Player select cancel?
No
Yes
9575
9530
Did console receive an Abandoned Card msg?
Yes
No
9535
Console goes to Abandoned Card Screen. Console continues to accrue PP and TC.
9540
Player Card Removed?
No
Yes
9545
GoTo Player Card Removed
9550
Console shows Legacy Pages until the timer on the page is completed
9565
GoTo System Game Console Main Screen
Yes
9555
Player Card still in?
No
9560
GoTo Legacy Attract Mode

FIG.95

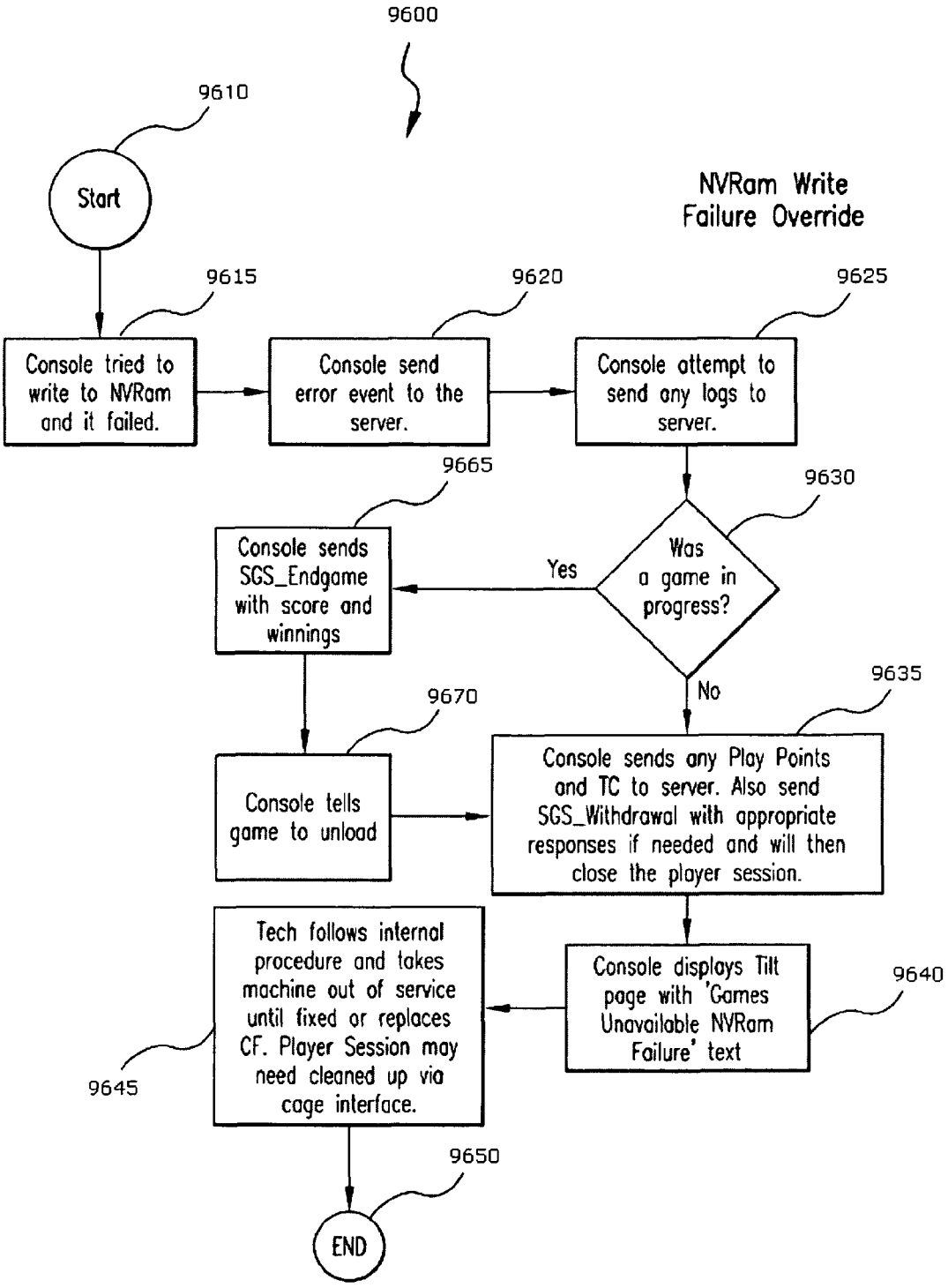

9600
9610
Start
NVRam Write Failure Override
9615
Console tried to write to NVRam and it failed.
9620
Console send error event to the server.
9625
Console attempt to send any logs to server.
9630
Was a game in progress?
Yes
9665
Console sends SGS_Endgame with score and winnings
No
9635
Console sends any Play Points and TC to server. Also send SGS_Withdrawal with appropriate responses if needed and will then close the player session.
9640
Console displays Tilt page with 'Games Unavailable NVRam Failure' text
9645
Tech follows internal procedure and takes machine out of service until fixed or replaces CF. Player Session may need cleaned up via cage interface.
9670
Console tells game to unload
9650
END

FIG.96

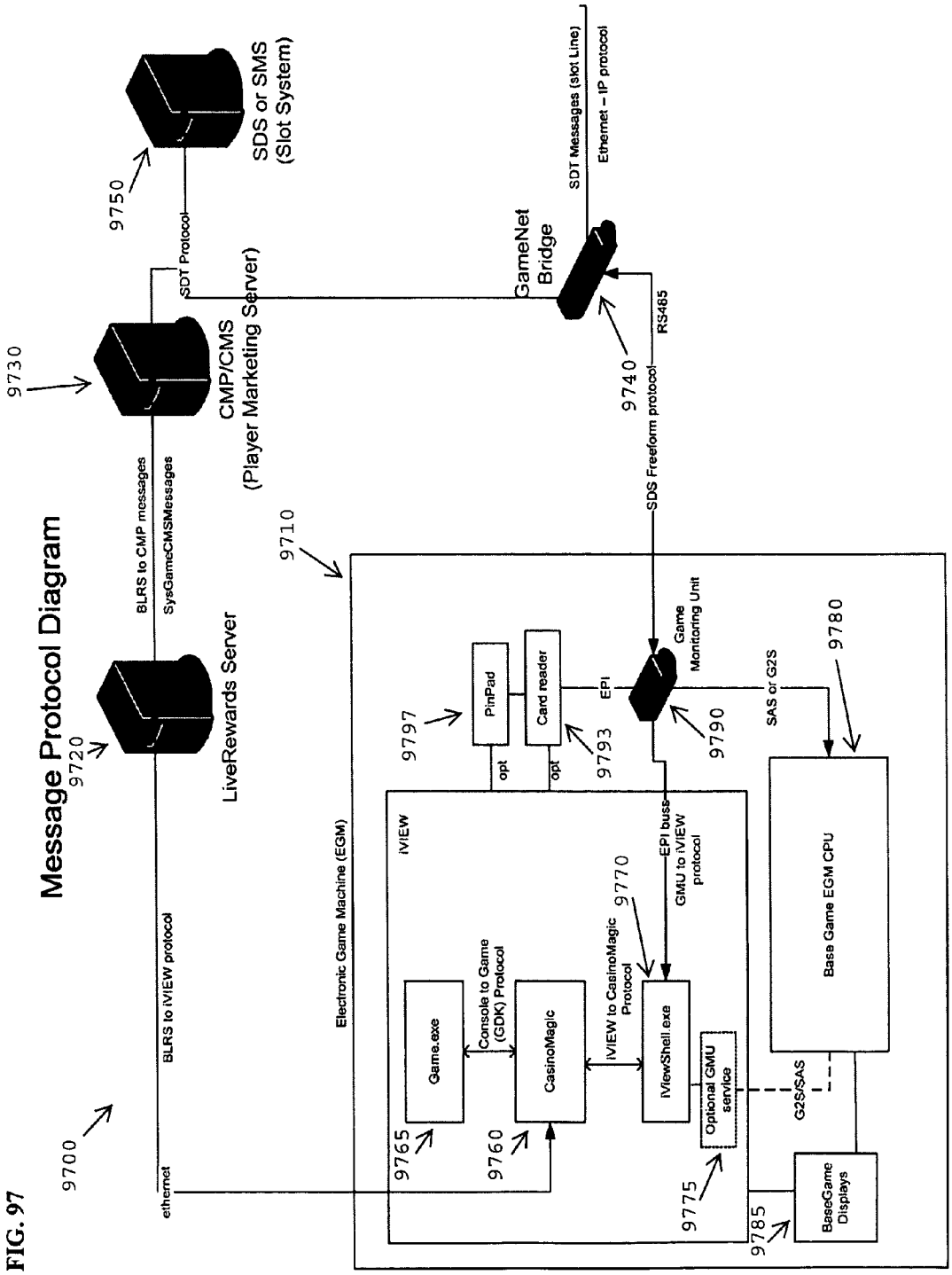

Message Protocol Diagram
9700
9710
9720
9730
9740
9750
9760
9765
9770
9775
9780
9785
9790
9793
9797
LiveRewards Server
CMP/CMS
(Player Marketing Server)
SDS or SMS
(Slot System)
GameNet
Bridge
BLRS to CMP messages
SysGameCMSMessages
SDT Protocol
SDT Messages (slot Line)
Ethernet – IP protocol
RS485
SDS Freeform protocol
Electronic Game Machine (EGM)
iVIEW
BLRS to iVIEW protocol
ethernet
Game.exe
Console to Game
(GDK) Protocol
CasinoMagic
iVIEW to CasinoMagic
Protocol
iViewShell.exe
Optional GMU
service
EPI buss
GMU to iVIEW
protocol
PinPad
Card reader
opt
opt
EPI
Game
Monitoring Unit
SAS or G2S
Base Game EGM CPU
G2S/SAS
BaseGame
Displays

FIG. 97

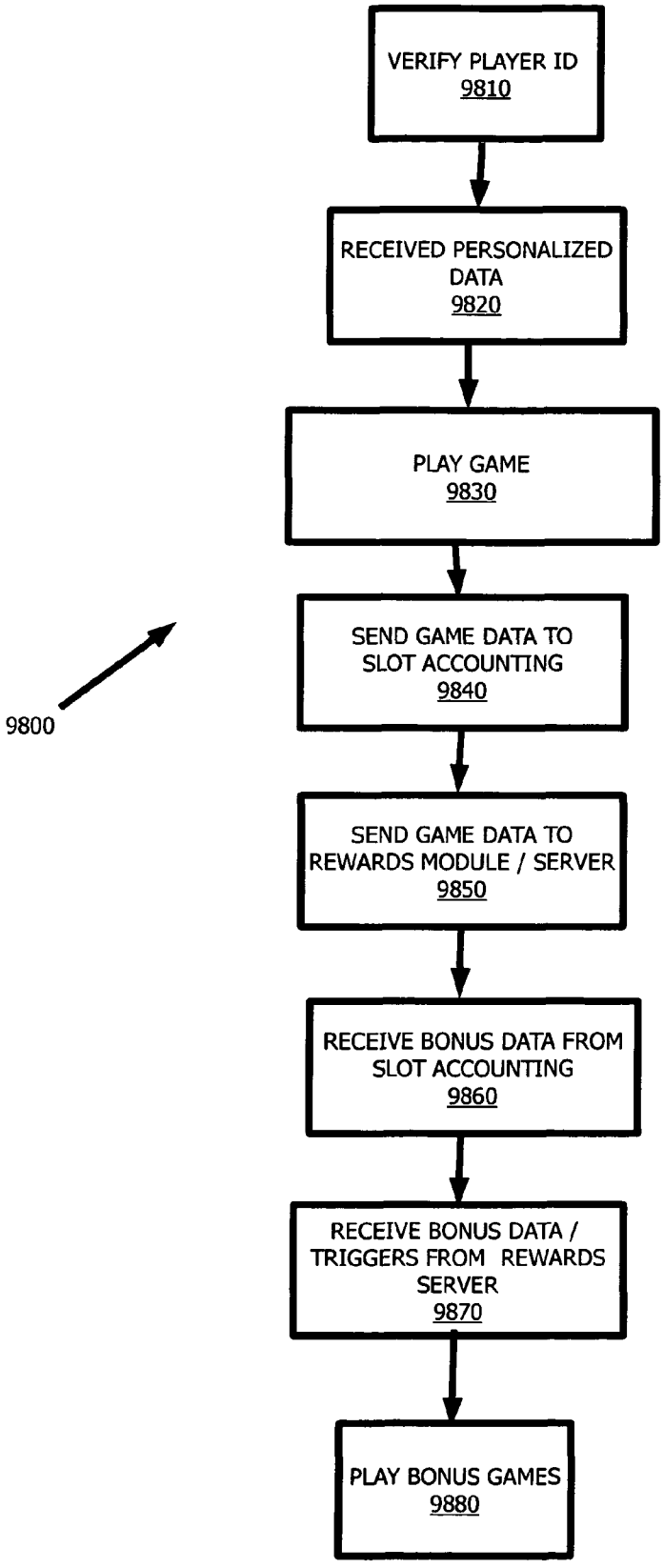

VERIFY PLAYER ID
9810
RECEIVED PERSONALIZED DATA
9820
PLAY GAME
9830
SEND GAME DATA TO SLOT ACCOUNTING
9840
SEND GAME DATA TO REWARDS MODULE / SERVER
9850
RECEIVE BONUS DATA FROM SLOT ACCOUNTING
9860
RECEIVE BONUS DATA / TRIGGERS FROM REWARDS SERVER
9870
PLAY BONUS GAMES
9880
9800

FIGURE 98

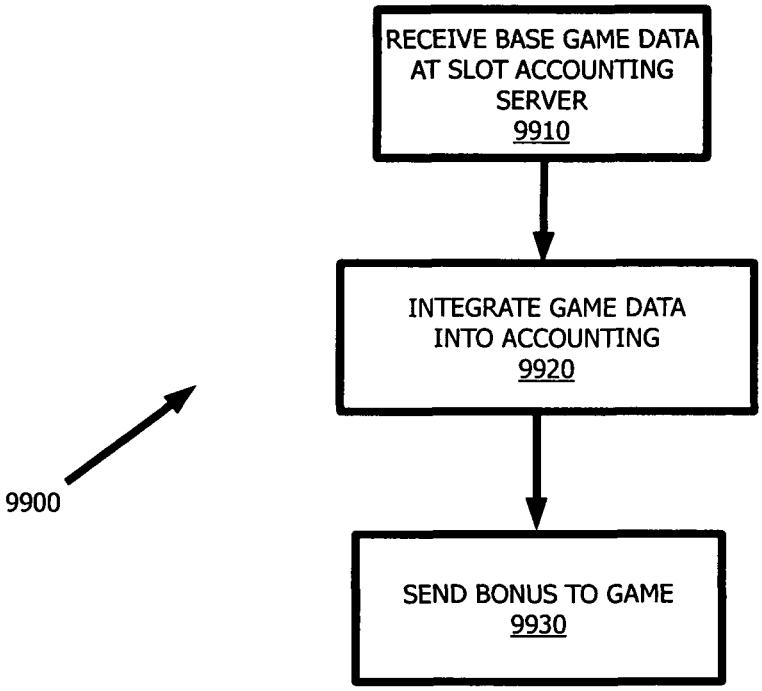

RECEIVE BASE GAME DATA AT SLOT ACCOUNTING SERVER
9910
INTEGRATE GAME DATA INTO ACCOUNTING
9920
SEND BONUS TO GAME
9930
9900

FIGURE 99

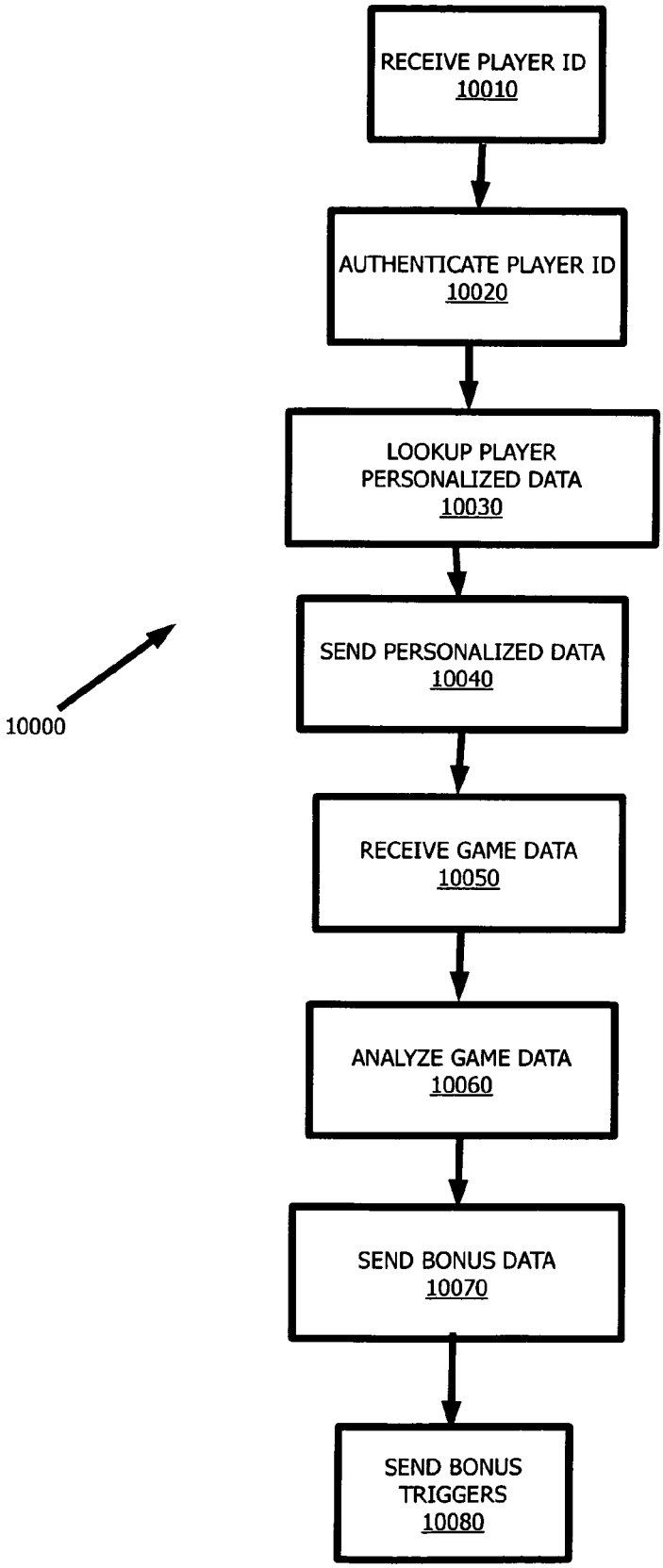

RECEIVE PLAYER ID
10010
AUTHENTICATE PLAYER ID
10020
LOOKUP PLAYER PERSONALIZED DATA
10030
SEND PERSONALIZED DATA
10040
10000
RECEIVE GAME DATA
10050
ANALYZE GAME DATA
10060
SEND BONUS DATA
10070
SEND BONUS TRIGGERS
10080

FIGURE 100

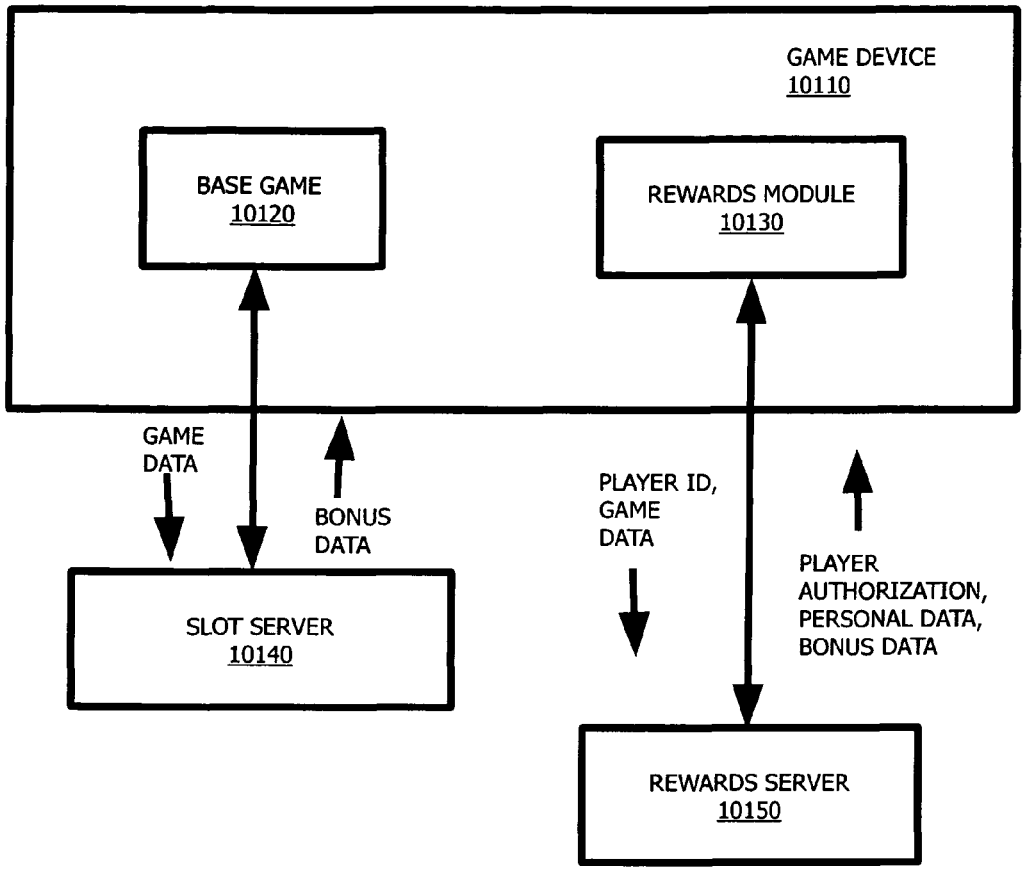

GAME DEVICE
10110
BASE GAME
10120
REWARDS MODULE
10130
GAME
DATA
BONUS
DATA
PLAYER ID,
GAME
DATA
PLAYER
AUTHORIZATION,
PERSONAL DATA,
BONUS DATA
SLOT SERVER
10140
REWARDS SERVER
10150
10100

FIGURE 101

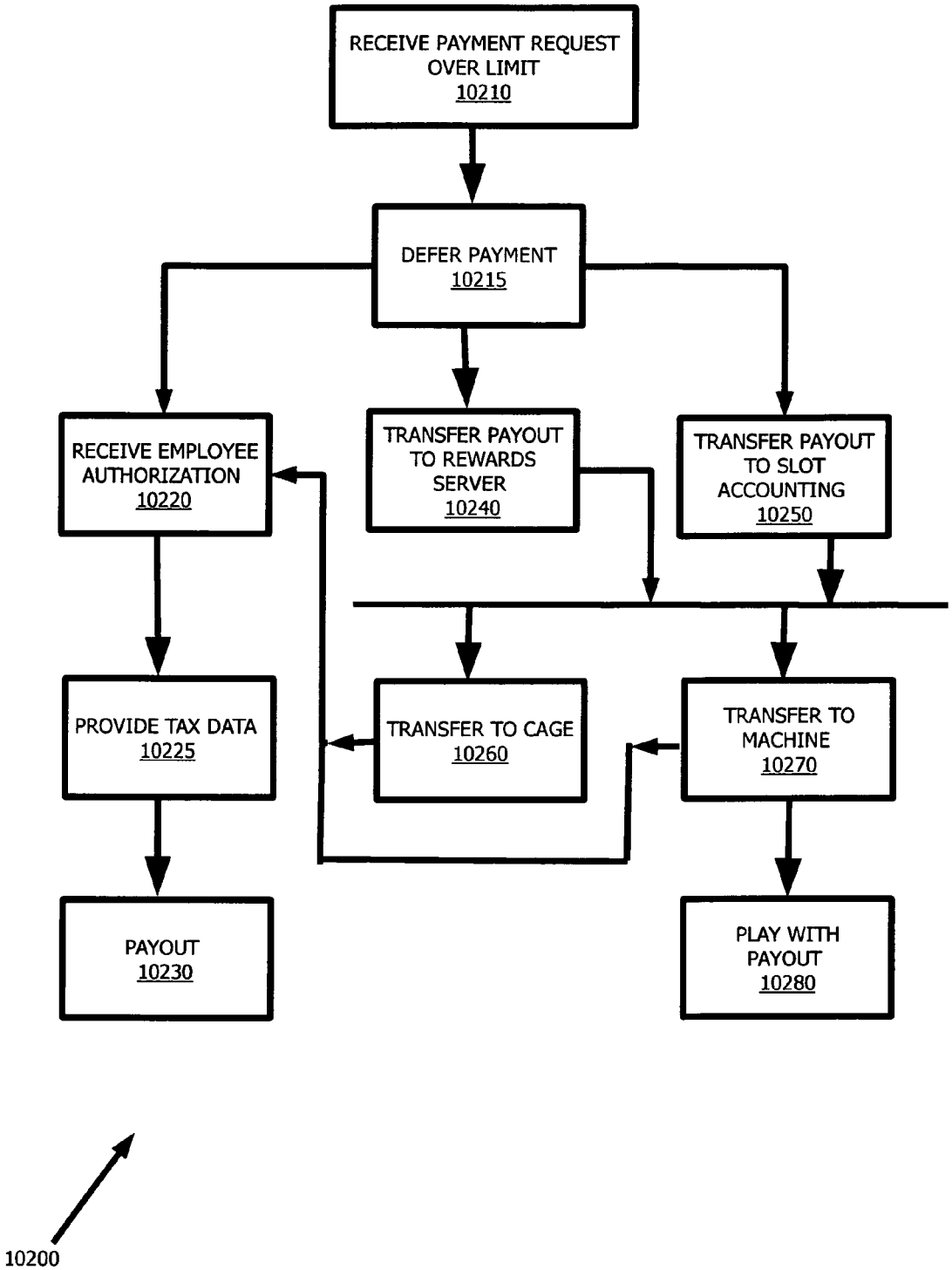

RECEIVE PAYMENT REQUEST OVER LIMIT 10210
DEFER PAYMENT 10215
RECEIVE EMPLOYEE AUTHORIZATION 10220
TRANSFER PAYOUT TO REWARDS SERVER 10240
TRANSFER PAYOUT TO SLOT ACCOUNTING 10250
PROVIDE TAX DATA 10225
TRANSFER TO CAGE 10260
TRANSFER TO MACHINE 10270
PAYOUT 10230
PLAY WITH PAYOUT 10280
10200

FIGURE 102

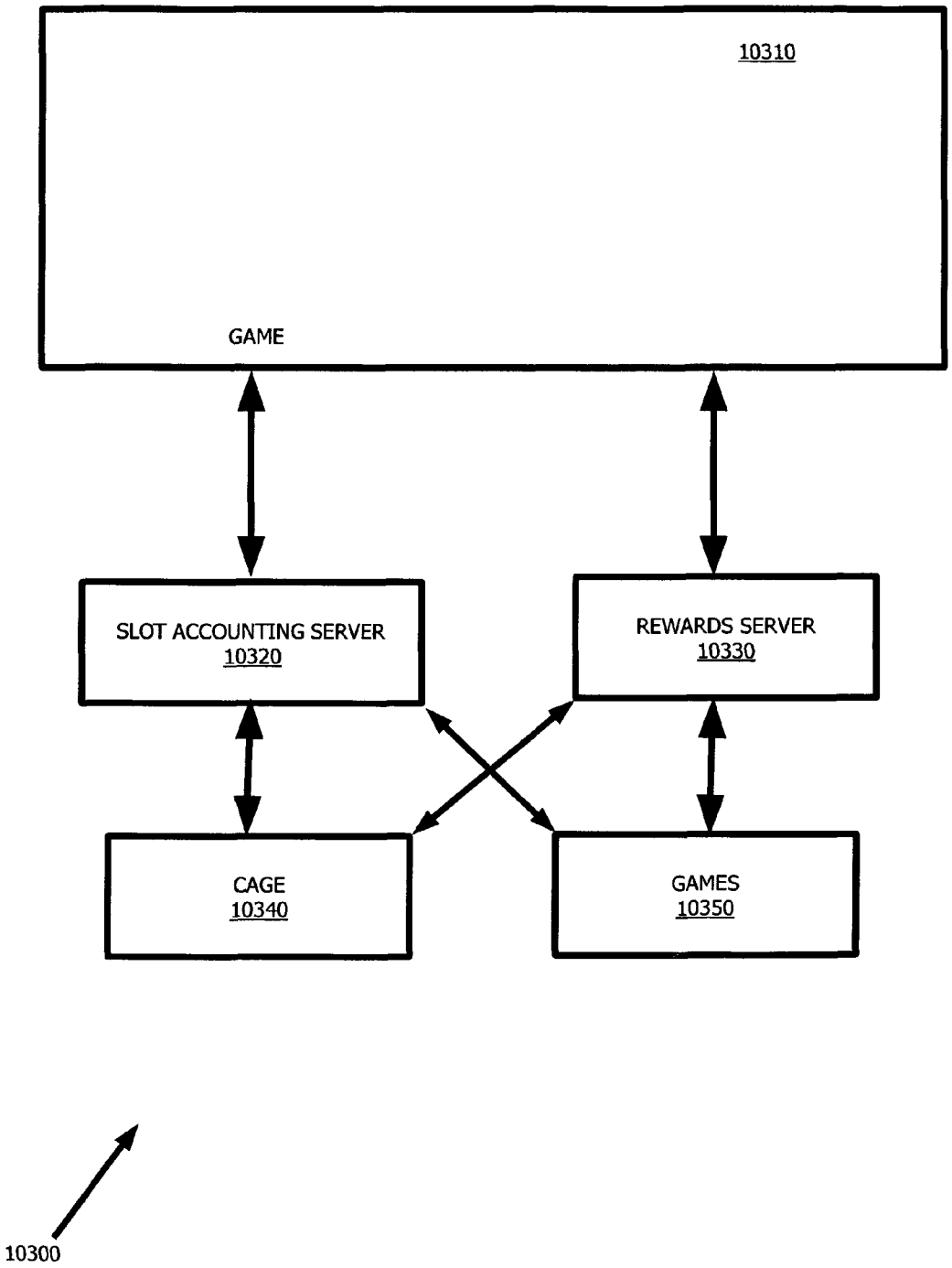

10310
GAME
SLOT ACCOUNTING SERVER
10320
REWARDS SERVER
10330
CAGE
10340
GAMES
10350
10300

FIGURE 103

NETWORKED GAMING SYSTEM COMMUNICATION PROTOCOLS AND METHODS

CROSS REFERENCE TO RELATED APPLICATIONS

This application is a continuation-in-part of both U.S. Ser. No. 11/938,644 and U.S. Ser. No. 11/938,666, both filed on Nov. 12, 2007, both of which claim the benefit of U.S. Ser. No. 60/865,649, filed on Nov. 14, 2006, and both of which were a continuation-in-part of U.S. Ser. No. 11/470,606, filed on Sep. 6, 2006, and U.S. Ser. No. 10/943,771, filed Sep. 6, 2004; and this application claims the benefit of U.S. Ser. No. 60/987,234, U.S. Ser. No. 60/987,274, U.S. Ser. No. 60/987,259, U.S. Ser. No. 60/987,266, U.S. Ser. No. 60/987,274 and U.S. Ser. No. 60/987,402, all filed on Nov. 12, 2007, all of which are hereby incorporated by reference herein in their entirety.

This application is also related to U.S. Ser. No. 11/065,757, filed Feb. 24, 2005, which is a continuation-in-part of U.S. Ser. No. 10/243,912, filed on Sep. 13, 2002, both of which are hereby incorporated by reference herein in their entirety.

This application is further related to U.S. Ser. No. 12/291,836, filed Nov. 12, 2008, U.S. Ser. No. 12/291,833, filed Nov. 12, 2008, U.S. Ser. No. 12/291,847, filed Nov. 12, 2008, U.S. Ser. No. 12/291,835, filed Nov. 12, 2008, U.S. Ser. No. 12/291,842, filed Nov. 12, 2008, U.S. Ser. No. 12/291,834, filed Nov. 12, 2008, U.S. Ser. No. 12/291,843, filed Nov. 12, 2008, U.S. Ser. No. 12/291,832, filed Nov. 12, 2008, U.S. Ser. No. 12/291,845, filed Nov. 12, 2008, all of which are hereby incorporated by reference herein in their entirety.

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BACKGROUND OF THE INVENTION

1. Field of the Invention

The field of the invention relates to wagering games, and more specifically to networked gaming systems and methods which offer or provide games, such as systems-based games, to players based on player patronage.

2. Description of the Related Art

Various networked gaming systems have been developed over the years beginning at least in the 1980's. With acceptance and utilization, users such as casino operators have found it desirable to increase the computer management of their facilities and expand features available on networked gaming systems. For instance, there are various areas in the management of casinos that is very labor intensive, such as reconfiguring gaming machines, changing games on the gaming machines, and performing cash transactions for customers.

Amongst the services that may be provided include player rewards based on game play and other patronage. Player tracking systems and servers may be implemented as part of networked gaming systems. To facilitate communication between the various components on the system, various communication protocols may be implemented.

There continues to be a need for improved protocols as information needs grow and as various features and aspects are implemented on the networked gaming systems.

SUMMARY OF THE INVENTION

In one aspect of the invention, a network-based game is provided through a player interface console based upon play of a base game. The network-based game is provided through a game server connected to a computerized management system.

In an embodiment, a method is provided. The method includes sending base game data from a game management unit of a first gaming device to a first server using a first protocol. The method also includes receiving the base game data from the game management unit of the first gaming device at the first server and integrating the base game data into a slot accounting system of the first server. The method further includes sending base game data from the game management unit to a system processor of a rewards module using a second protocol and receiving the base game data at the rewards module of the first gaming device. The method also includes communicating personalized gaming data from a second server to a system processor of a rewards module of the first gaming device using a third protocol.

Additionally, the method includes receiving the personalized gaming data at the system processor of the rewards module of the first gaming device and integrating the personalized gaming data into the game management unit of the first gaming device. The method further includes communicating personalized gaming results from a system processor of a rewards module of the first gaming device to a second server using a third protocol and receiving the personalized gaming results at the second server from the first gaming device. Moreover, the method includes analyzing the personalized gaming results for threshold changes at the second server and sending triggers for personalized bonus games from the second server to the first gaming device using the third protocol. The method also includes receiving from the second server personalized bonus game triggers at the first gaming device.

In another embodiment, a method is provided. The method includes receiving identification of a player and communicating identification of the player to a second server using a third protocol. The method further includes receiving personalized gaming parameters from the second server using the third protocol and integrating personalized gaming parameters into a game management unit of a gaming device. The method also includes communicating base game data from the game management unit of the gaming device to a first server using a first protocol. The method further includes communicating base game data from the game management unit to a system processor of a rewards module using a second protocol. The method also includes communicating rewards game data from a system processor of a rewards module of the gaming device to the second server using a third protocol. The method further includes receiving from the second server bonus game triggers using the third protocol.

In still another embodiment, a method is provided. The method includes receiving identification of players at a plurality of gaming devices. The method also includes communicating identification of the players to a second server using a third protocol. The method further includes receiving personalized gaming parameters from the second server using the third protocol at each gaming device of the plurality of gaming devices. Also, the method includes integrating personalized gaming parameters into a game management unit of each gaming device. Additionally, the method includes

sending base game data from the game management units of the plurality of gaming devices to a first server using a first protocol. Moreover, the method includes sending base game data from the game management unit to a system processor of a rewards module using a second protocol in a plurality of gaming devices. Furthermore, the method includes communicating rewards game data from the system processor of a rewards module of each of the plurality of gaming devices to the second server using the third protocol. The method also includes sending triggers for personalized bonus games from the second server to gaming devices of the plurality of gaming devices using the third protocol.

In another embodiment, a method is provided. The method includes playing a game at a first gaming machine. The method also includes accumulating a balance above a first threshold amount. The method further includes paying out a portion of the balance below the first threshold amount. The method also includes deferring payout of the portion of the balance above the first threshold amount.

In yet another embodiment, a method is provided. The method includes playing a game at a first gaming machine. The method also includes accumulating a balance above a first threshold amount. The method further includes paying out a portion of the balance below the first threshold amount. The method also includes deferring payout of the portion of the balance above the first threshold amount. The method further includes transferring the portion of the balance above the first threshold amount to a server.

In still another embodiment, a method is provided. The method includes receiving player identification data from a rewards card of the player at a first gaming machine. The method also includes verifying player identification data of a rewards card with identification input of the player. The verifying includes submitting player identification data and input of the player to a server and receiving an authorization from the server. The method further includes playing a game at a first gaming machine. The method also includes accumulating a balance above a first threshold amount. The method further includes paying out a portion of the balance below the first threshold amount. The method also includes deferring payout of the portion of the balance above the first threshold amount. The method further includes transferring the portion of the balance above the first threshold amount to a server.

Further aspects, features and advantages of various embodiments of the invention may be apparent from the following detailed disclosure, taken in conjunction with the accompanying sheets of drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** illustrates a main game panel on a player console in accordance with one or more embodiments of the present invention.

FIG. **2**A, **2**B, **2**C illustrate a main game panel on a player console at various stages of game play of a player in accordance with one or more embodiments of the present invention.

FIG. **3**A, **3**B, **3**C, **3**D illustrate a sequence of example game panels on a player console showing a bingo game from beginning to end in accordance with one or more embodiments of the present invention.

FIG. **4**A, **4**B illustrate a rewards and a help panel on a player console providing information about an associated game, such as bingo or poker, in accordance with one or more embodiments of the present invention.

FIG. **5**A, **5**B, **5**C illustrate a sequence of example game panels on a player console showing a poker game from beginning to game play in accordance with one or more embodiments of the present invention.

FIG. **6**A, **6**B, **6**C illustrate a main game, rewards and help panel on a player console providing information about an associated poker game in accordance with one or more embodiments of the present invention.

FIG. **7**A, **7**B (collectively, FIG. **7**) illustrate a contrast between level one rewards versus level five rewards as shown on a rewards panel on a player console in accordance with one or more embodiments of the present invention.

FIG. **8**A, **8**B, **8**C illustrate game ending panels on a player console with various outcomes in accordance with one or more embodiments of the present invention.

FIG. **9**A-**1**, **9**A-**2**, **9**A-**3**, **9**A-**4**, **9**B-**1**, **9**B-**2** (collectively, FIG. **9**) illustrate a cashing out sequence beginning from a main game panel on a player console in accordance with one or more embodiments of the present invention.

FIG. **10**A, **10**B, **10**C (collectively, FIG. **10**) illustrate a sequence of advertising panels on a player console in accordance with one or more embodiments of the present invention.

FIG. **11**A illustrates an example high-level block diagram of a gaming machine in accordance with various embodiments.

FIG. **11**B illustrates an example gaming machine in accordance with various embodiments.

FIGS. **12**A and **12**B illustrate a simple block diagram of a rewards server connecting over a network to a representative example gaming machine in accordance with various embodiments.

FIG. **13**, **14** illustrate a pair of screenshots to access the Live Rewards employee functions at the iVIEW device.

FIG. **15**, **16**, **17** illustrate a series of screenshots showing the Machine Details in the employee function pages at the iVIEW.

FIG. **18**, **19** illustrate a screenshot of the Device Configuration in the employee function pages at the iVIEW.

FIG. **20**A, **20**B, **20**C, **20**D (collectively referred to as FIG. **20**) illustrate a series of screenshots of the Reports available on iVIEW showing Withdrawal transactions, Hand pay transactions, and game play transactions. These pages are seen in the employee function pages

FIG. **21**A, **21**B (collectively referred to as FIG. **21**) illustrate a series of screenshots shown to the employee if the device is to be taken out of service. These pages are seen in the employee function pages.

FIG. **22** illustrates a screenshot of the Clear NV-RAM on the iVIEW. This allows the battery backed ram or other iVIEW storage device to be cleared of its variables and re-initialize itself back to its original state as if Live Rewards was never run on the device.

FIG. **23** illustrates a screenshot of the Player Page shown to the player after a valid player card insertion at the Player Tracking panel. The player can select ePromo (funds transfers to the gaming device), Service Request, or Play Games and enter the live Rewards gaming portal on the iVIEW.

FIG. **24**, **24**A (collectively referred to as FIG. **24**) illustrate a pair of screenshots of the Live Rewards Server Activate iVIEW for Live Rewards Games. Live Rewards can be enabled or disabled for each gaming device on the casino floor.

FIG. **25**, **25**A (collectively referred to as FIG. **25**) illustrate a pair of screenshots of the Live Rewards Server Assign Games to Player feature. This is where specific games and their pay table sets are assigned to specific club levels of players.

FIG. **26**, **26**A (collectively referred to as FIG. **26**) illustrate a pair of screenshots of the Live Rewards Server Ban Players user interface. Specific players can be prohibited to play the Live Rewards product.

FIG. **27**, **27**A (collectively referred to as FIG. **27**) illustrate a pair of screenshots of the Live Rewards Server Clear PIN lockout function. Players that enter their PIN (personnel identification number) wrong too many times in a row have their account locked. This interface for casino personnel will allow the lock to be cleared.

FIG. **28**, **28**A (collectively referred to as FIG. **28**) illustrate a pair of screenshots of the Live Rewards Server Copy Pay Table Sets feature. Other pay table sets can be copied as a means to quickly setup slightly modified pay table sets.

FIG. **29**, **29**A (collectively referred to as FIG. **29**) illustrate a pair of screenshots of the Live Rewards Server Debit/Credit Player Account feature. A player has 4 player buckets that are non-restricted for use and 4 that are Jurisdictional and may require a hand pay to collect the value. This screen gives the casino personnel the ability to debit or credit any of the buckets.

FIG. **30**, **30**A (collectively referred to as FIG. **30**) illustrate a pair of screenshots of the Live Rewards Server Global Settings feature. Various variables are configured here and these settings are sent to the iVIEW for use.

FIG. **31**, **31**A (collectively referred to as FIG. **31**) illustrate a pair of screenshots of the Live Rewards Server Import Pay Table Sets feature. This allows casino personnel to import different pay tables for a particular game ID. The files are in XML format.

FIG. **32**, **32**A (collectively referred to as FIG. **32**) illustrate a pair of screenshots of the Live Rewards Server Game Start Rules. This is where the casino operator configures the rules for a player earning bonus games. This is player type specific. How many play points are accrued for X amount of wagering required. A start threshold is configured here as another means to control the Bonus game frequency. A base game even, a max bet event, a session time event, and session continuation time event are configured to increment a players specific threshold counter by a certain amount. Once the player has enough Threshold counter points (over the threshold) and the player has enough play points for the game then the selected game will be able to be played by the player.

FIG. **33** illustrates a screen shot of the Live Rewards Server login page. Two users with administrator rights are required to modify any settings.

FIG. **34**, **34**A (collectively referred to as FIG. **34**) illustrate a pair of screenshots of the Live Rewards Server Manage Pay Table Sets feature. This page allows the casino attendant select different pay table sets for specific games for specific play types. This is showing the Blue Spot Bingo being configured.

FIG. **35**, **35**A (collectively referred to as FIG. **35**) illustrate a pair of screenshots of the Live Rewards Server Manage Pay Table Sets feature. This page allows the casino attendant to select different pay table sets for specific games for specific play types. This is showing the PayDay Poker being configured.

FIG. **36**, **36**A (collectively referred to as FIG. **36**) illustrate a pair of screenshots of the Live Rewards Server Modify Pay Table Sets feature. This page allows the casino attendant to edit a pay table set. The cost to play each level is set here shown as Threshold or Play Points required. The specific game settings used for this PayTable can be modified (view game settings). And the specific amount of cash and/or Bonus Points can be set for each winning combination in a game. This is showing how Blue Spot Bingo is configured.

FIG. **37**, **37**A (collectively referred to as FIG. **37**) illustrate a pair of screenshots of the Live Rewards Server Modify Pay Table Sets feature. This page allows the casino attendant to edit a pay table set. The cost to play each level is set here shown as Threshold or Play Points required. The specific game settings used for this PayTable can be modified (view game settings). And the specific amount of cash and/or Bonus Points can be set for each winning combination in a game. This is showing how PayDay Poker is configured.

FIG. **38**, **38**A (collectively referred to as FIG. **38**) illustrate a pair of screenshots of the Live Rewards Server Player Session Activity feature. All Transactions that a player has done against his player buckets in the server are shown here. Every debit and credit is accounted for on what iVIEW, what session, what time, as are all bucket balances.

FIG. **39**, **39**A (collectively referred to as FIG. **39**) illustrate a pair of screenshots of the Live Rewards Server Player Session Deposits feature. Every transaction for an actively playing person is tracked here including deposits, bucket affected, current balances, who initiated the transaction, and what is the status on the pending transaction (committed, rolled back, cancelled, etc.)

FIG. **40**, **40**A (collectively referred to as FIG. **40**) illustrate a pair of screenshots of the Live Rewards Server Player Session Withdrawals feature. Every withdrawal transaction to the player account for an actively playing player is shown here. For example: if you spend your accrued play points, it gets debited from your player card account or if your cash winnings are transferred from the iVIEW to the slot machine, it gets debited from your Live Rewards account and credited to your main player account on the casino management system or onto the slot machine itself.

FIG. **41**, **41**A (collectively referred to as FIG. **41**) illustrate a pair of screenshots of the Live Rewards Server Player Session Game Activity. All game transactions for a specific player are shown on this screen.

FIG. **42**, **42**A (collectively referred to as FIG. **42**) illustrate a pair of screenshots of the Live Rewards Server Prizes-Conversion screen. This screen shows casino personnel which types of prizes are configured for which types of players, they effective cost or value of the prize types and what are the currently configured expire rules for these player account buckets.

FIG. **43**, **43**A (collectively referred to as FIG. **43**) illustrate a pair of screenshots of the Live Rewards Server Report configurations feature. All reports will be configured with this information. Also the time that the reports will run once a day can be configured here.

FIG. **44**, **44**A (collectively referred to as FIG. **44**) illustrate a pair of screenshots of the Live Rewards Server Notification Messages report. All iVIEW events and Live Rewards server events are logged to this page. This feature is used to help casino personnel view error or other events for maintenance and customer service reasons.

FIG. **45**, **45**A (collectively referred to as FIG. **45**) illustrate a pair of screenshots of the Live Rewards Server Games Settings Changes History report. All settings that are changed to the Live Rewards server are viewable here. What was changed, who did it and time are the types of data shown. Regulators use this to monitor for compliance reasons.

FIG. **46**, **46**A (collectively referred to as FIG. **46**) illustrate a pair of screenshots of the Live Rewards Server Global Settings Change History report. All settings that are changed to the Live Rewards server are viewable here in this report. What was changed, who did it and time are the types of data shown. Regulators use this to monitor for compliance reasons.

FIG. **47**, **47**A (collectively referred to as FIG. **47**) illustrate a pair of screenshots of the Live Rewards Server Pay Table Settings Change History report. All settings that are changed to the Live Rewards server are viewable here. What was changed, who did it and time are the types of data shown. Regulators use this to monitor for compliance reasons.

FIG. **48**, **48**A (collectively referred to as FIG. **48**) illustrate a pair of screenshots of the Live Rewards Server Live Rewards Start Rules Settings Change History report. All settings that are changed to the Live Rewards server are viewable here. What was changed, who did it and time are the types of data shown. Regulators use this to monitor for compliance reasons.

FIG. **49**, **49**A (collectively referred to as FIG. **49**) illustrate a pair of screenshots of the Live Rewards Server User Session Logs report. All logins, attempted, successful, failures are logged here. Regulators use this to monitor for compliance reasons.

FIG. **50**, **50**A (collectively referred to as FIG. **50**) illustrate a pair of screenshots of the Live Rewards Server Patron Summary/Details report. Various game play history, debits, credits, wins/losses are shown here for specific players in a specific time range. Summary or details pages are available.

FIG. **51**, **51**A (collectively referred to as FIG. **51**) illustrate a pair of screenshots of the Live Rewards Server iVIEW summary report. Device specific reports (independent of player) is shown here.

FIG. **52**, **52**A (collectively referred to as FIG. **52**) illustrate a pair of screenshots of the Live Rewards Server Liability Report report. The total liability to the casino is shown here for all buckets types for all players combined.

FIG. **53**, **53**A (collectively referred to as FIG. **53**) illustrate a pair of screenshots of the Live Rewards Server Patron Details report. Summary or detailed data is available on a specific player or all players. This shows the individual transaction details.

FIG. **54**, **54**A (collectively referred to as FIG. **54**) illustrate a pair of screenshots of the Live Rewards Server Summary report. Summary data for each player or all players is shown here.

FIG. **55**, **55**A (collectively referred to as FIG. **55**) illustrate a pair of screenshots of the Live Rewards Server Transaction Details report. All transactional data is logged and is viewable here. Transactions are debit/credits to the player accounts. The transaction ID, data/time, which player card, source of transaction, source ID, prize type, transaction type (debit/credit), transaction value, jurisdictional event, status is shown.

FIG. **56**, **56**A (collectively referred to as FIG. **56**) illustrate a pair of screenshots of the Live Rewards Server Create New User feature. New users are given administrator roles (all features), reports only, and/or Player management rights only.

FIGS. **57-1**, **57-2**, **57-3** (collectively referred to as FIG. **57**) illustrate a flowchart of two players playing using the same player card and inserting them into two different slot machines player tracking systems at different times. The cards are both create child session accounts from the same parent master player account. The available funds for each player are shown throughout the sessions of each person.

FIGS. **58**, **58-1**, **58-2**, **58-3**, **58-4**, **58-5**, **58-6** (collectively referred to as FIG. **58**) illustrate a spreadsheet showing the Live Rewards Session accounts and how they work throughout a series of 36 steps. This spreadsheet shows 1 sub account playing on iVIEW ID **176** using player card #123. This person is the first to put in the player card. The session buckets for this player are shown and the master server buckets or meters are shown.

FIGS. **59-1**, **59-2**, **59-3** (collectively referred to as FIG. **59**) are the continuation of FIG. **58** to the right side of the spreadsheet. This shows the 2^{nd} player playing on iVIEW ID **473** using player card #123 as well. This player inserts his card at step **13** and is the 2^{nd} session account off of the parent account.

FIG. **60** illustrates a network diagram of the Live Rewards Gaming system. This figure shows how the client side is configured together as well as how the slot management system and CMP/CMS systems are linked to the Live Rewards Server.

FIG. **61** illustrates a network diagram of the Live Rewards Gaming system. This figure shows how the client side is configured together as well as how the slot management system and CMP/CMS systems are linked to the Live Rewards Server.

FIG. **62-1**, **62-2** (collectively referred to as FIG. **62**) illustrate a software flowchart showing how the Live Rewards bonus game frequency of play is controlled. The server side variables are configured as shown in FIG. **32**. Events contribute to a threshold counter. The threshold counter and the cost of the game are used to control the frequency of a player being able to play a live rewards game. Even if the player has enough play points to play the game may no be enabled to play unless the business rules on this figure are achieved.

FIG. **63-1**, **63-2** (collectively referred to as FIG. **63**) illustrate a software flowchart of the ACSC Live rewards transactions both on the client and in the server.

FIG. **64** illustrates a flowchart of the ACSC iSERIES Live Rewards Card in Process.

FIG. **65** illustrates a flowchart of the ACSC iSERIES Live Rewards Play Points Earned Process.

FIG. **66** illustrates a flowchart of the ACSC iSERIES Live Rewards Game Outcome Results Process.

FIG. **67** illustrates a flowchart of the ACSC iSERIES Live Rewards Cash/Points Withdrawal process.

FIG. **68** illustrates a screenshot of the ACSC iSERIES user interface to generate encrypted number of valid assets for System Games. It is part of the license management of the Live Rewards Server.

FIG. **69** illustrates a screenshot of the ACSC iSERIES administration page. From this page all sub menus are allowed to be accessed.

FIG. **70** illustrates a screenshot of the ACSC iSERIES Live Rewards administration page. This is where the player assigns specific Asset numbers (EGMS or game devices) to run Live Reward System Games. This is also where the encrypted license management keys are entered.

FIG. **71** illustrates a screenshot of the ACSC iSERIES Live Rewards administration page where a the casino applies the encrypted number of valid assets to Run Live Rewards.

FIG. **72** illustrates a screenshot of the ACSC iSERIES Live Rewards administration page where the total number of Asset licenses available and unsent are shown.

FIG. **73** illustrates a screenshot of the ACSC iSERIES Live Rewards administration page where the site can maintain assets allowed to be part of the System Games. This site has an unlimited number of licenses.

FIG. **74** illustrates a screenshot of the ACSC iSERIES Live Rewards administration page where the site can maintain assets allowed to be part of the System Games. This site has a 5000 licenses available to be assigned.

FIG. **75** illustrates a screenshot of the ACSC iSERIES Live Rewards administration page where the site can maintain assets allowed to be part of the System Games. This site has a 5000 licenses available to be assigned. The site is assigning

a specific asset number of 525 to be allowed to run the Live Rewards system game product.

FIG. **76** illustrates a screenshot of the ACSC iSERIES Live Rewards administration page where the site can control various global features.

FIGS. **77**, **77-1**, **77-2**, **77-3**, **77-4**, **77-5**, **77-6** (collectively referred to as FIG. **77**) illustrate a database schema for the Live Rewards Server.

FIGS. **78-1**, **78-2**, **78-3** (collectively referred to as FIG. **78**) illustrate a flowchart of the Boot-up recovery process of the live rewards games on iVIEW.

FIG. **79** illustrates a flowchart of the Attract mode logic.

FIG. **80** illustrates a flowchart of what happens at Player Card insertion time.

FIGS. **81-1**, **81-2**, **81-3** (collectively referred to as FIG. **78**) illustrate a flowchart of what happens when the player interacts with the Legacy Player Pages.

FIGS. **82-1**, **82-2**, **82-3** (collectively referred to as FIG. **82**) illustrate a flowchart of what happens when the on the System Game Console Main game screen.

FIGS. **83-1**, **83-2** (collectively referred to as FIG. **83**) illustrate a flowchart of what happens when the player enters the Help/Rewards pages on the iVIEW.

FIGS. **84-1**, **84-2**, **84-3** (collectively referred to as FIG. **84**) illustrate a software flowchart of what happens during the game play process.

FIGS. **85-1**, **85-2**, **85-3** (collectively referred to as FIG. **85**) illustrate a software flowchart of what happens during the cash out process.

FIGS. **86-1**, **86-2**, **86-3** (collectively referred to as FIG. **86**) illustrate a software flowchart of what happens during a regular cash out procedure.

FIG. **87** illustrates a software flowchart of what happens during a jurisdictional Hand pay.

FIG. **88** illustrates a software flowchart of what happens when the employee commits the hand pay.

FIG. **89** illustrates a software flowchart of what happens when the employee cancels the hand pay.

FIG. **90** illustrates a software flowchart of what happens when the player removes the player card.

FIG. **91** illustrates a software flowchart of what happens when the server connection is lost from the iVIEW.

FIG. **92** illustrates a software flowchart of how the Auto Play logic works.

FIG. **93** illustrates a software flowchart of what happens when the employee card is inserted.

FIG. **94** illustrates a software flowchart of heartbeat messages from the iVIEW to the Live Rewards server or SGS.

FIG. **95** illustrates a software flowchart of what happens when abandoned player cards or directed messages come in from the Game monitoring unit.

FIG. **96** illustrates a software flowchart of what happens when the writing to the non-volatile memory fails.

FIG. **97** illustrates a message protocol diagram for a gaming network including a Live Rewards server.

FIG. **98** illustrates an embodiment of a process of operating a gaming machine.

FIG. **99** illustrates an embodiment of a process of a slot accounting server interacting with a game machine.

FIG. **100** illustrates an embodiment of a process of operating a rewards server.

FIG. **101** illustrates an embodiment of a gaming system as used with the processes of FIGS. **98-100**, for example.

FIG. **102** illustrates an embodiment of a process of paying out and transferring payouts.

FIG. **103** illustrates an embodiment of a gaming system as used with the process(es) of FIG. **102**, for example.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring generally to FIG. **1-23**, a gaming rewards system, such as Bally Live Rewards, lets you offer carded players exciting bonus games through your existing gaming machines with networked player interface units, such as Bally iVIEW-equipped slot machines. This remarkable advancement in technology creates a thrilling gaming experience designed specifically to increase wagering activity. Once a Player's Club card is inserted into the slot machine, each bet on the base game brings the player closer to earning bonus game play. Once the minimum game play requirements have been met, the bonus game either starts automatically or the player can press a button to start the game. Bonus game winnings can be awarded in cash (to be transferred to the base game through an electronic funds transfer) or in bonus points. In one or more embodiments, Live Rewards bonus games require base game play; they cannot be played directly. Live Rewards uses high-resolution, animated graphics, quality sound, and a touch-screen display to provide players with bonus game content. This content is managed by the Live Rewards Server (LRS) through the Windows-based Live Rewards management application. There are currently two bonus games available through Live Rewards: Blue Spot Bingo and Payday Poker.

The Live Rewards user interface runs on the iVIEW display, allowing customers to play bonus games and transfer their cash winnings to the base game. Players can choose from two Live Rewards bonus games: Blue Spot Bingo and Payday Poker.

Live Rewards has two distinct counters that determine the player's bonus game experience: play points and game start threshold.

Play points are used to determine the pay table used for the bonus game—the more play points a player accrues, the higher the payout amount (equal to one cent for determining prizes on bonus game pay tables) of the corresponding pay table. A play point is defined as one cent of every dollar bet at the base game. This is a pre-set, non-configurable value that has no actual monetary value and cannot be redeemed. The rate at which a player accrues play points is determined by players club membership level and is configured through the Live Rewards Server.

Players track play point accrual through the Reward Level indicator on the left-hand side of the screen. As play points are accrued and the reward level increments, the player sees poker chips stack up. When game play begins, the number of play points used for the game is determined by the number of play points accrued minus the number of play points in the highest qualifying Pay table.

The game start threshold determines when a player has played enough base games to start a bonus game.

For each base game played, the player earns a TC (Threshold Counter), which is depicted on the user interface as a light surrounding the selected game logo. A player earns a TC based on the number of games played the time spent playing, and the maximum bet for each game.

Play points and the game start threshold may be programmed directly on the gaming machines or may be managed remotely from a networked server, such as the Bally Live Rewards Server (LRS).

Play Points are the unit currency used by the player to play a Live Rewards game. Play points are earned based on Base Game Wager times and the accrual rate set for each Player's Club level. Play Points have no redeemable value, but are considered to be worth $0.01 for the purpose of deriving the

Live Rewards game Pay tables. You cannot adjust this value. In one or more embodiments, play points are restricted to the play of Live Rewards games and are not cashable.

Play Points earned on the iVIEW are transferred to the player's session account on the LRS before any Live Rewards game begins and at player card removal. Play Points are decremented from the player's server account when a Live Rewards game is played.

The amount of Play Points decremented is determined by the amount of Play Point accumulated when the player has played a number of games equal to the Live Rewards Game Start Threshold. The number of Play Points determine, which Pay Table the player receives with the Pay Table that takes the maximum number of earned Play Points being automatically selected. In one or more embodiments, Play Points are awarded only by play of base game and are not awarded by any other means.

The number of Play Points awarded is equal to the product of the following equation:

Play Points=[Base Game Wager (in dollars)×Accrual Rate (set by BLRS)]/[Value of Play Points (in dollars)]

Client Side processing of Play Points (PP) and Threshold counters (TC's)

1) On card-in the client may register the player's card number to the iVIEW and receive the values of the reserve account for display purposes.
2) As the player plays the base game PP and TC's may accrue on the client.
3) At Card-out, Recovery start-up, and before a Begin Game is sent to the LIVE REWARDS SERVER all PP and TC accrued on the iVIEW are transferred to the LIVE REWARDS SERVER.
4) When the iVIEW has determined the player has accrued enough TC and PP for a game (combined total of reserve account and remaining PP's and TC's on iVIEW) the iVIEW allows the player the option to start a game. If the player elects to start a game:
   a) All PP's and TC's are transferred via 3-stage commit to LIVE REWARDS SERVER.
   b) Current totals in reserve account are returned to iVIEW.
   c) If total is still acceptable to starting a game iVIEW sends a Begin Game message to LIVE REWARDS SERVER that includes the number of PP's and TC's to be used.
   d) Based on server setting send a −1 for TC's to be used may use them all.
   e) LIVE REWARDS SERVER sends a response back to the iVIEW that includes a History ID number (HID) and a success or Fail.
   f) If Success is returned iVIEW proceeds to play the system game.
   g) At game conclusion a End Game messages sent to LIVE REWARDS SERVER Via 2 stage commit (stage 1 of the 3 stages was Begin Game). The end game contains the value of any winnings the player won.
   h) Winnings in the End Game are stored in the player's reserve account.
5) Bonus Points (BP's) are immediately transferred to CMS from LIVE REWARDS SERVER.
6) Cash winnings in the reserve account are shown to the player and accessible after Pin-in for AFT transfer from LIVE REWARDS SERVER to the base game.
7) On recovery any PP's, TC's, BP's and cash are transferred to LIVE REWARDS SERVER.
8) On recovery, If a Begin Game was sent and an End game was not completed the End game is sent with a recovery status and the LIVE REWARDS SERVER rolls back the PP's and TC's used for the incomplete game are rolled back into the player's account and any reserve account for this card#/iVIEW ID is also rolled back into the player's account.
9) If the player is playing slowly and a Begin Game, End Game, or card out has not occurred in (Heartbeat time length—1 minute) the iVIEW sends a heartbeat to the LIVE REWARDS SERVER to keep the player's reserve account reserved.

Referring now to the drawings, wherein like reference numbers denote like or corresponding elements throughout the drawings, and more particularly referring to FIG. **1**, player console **101** is shown, such as may be utilized to provide games, such as wagering games, to eligible patrons based upon pre-selected criterion, in accordance with one or more embodiments.

Referring further to FIG. **1**, player console **101** may comprise a touch sensitive display and a console processor board and be constructed as part of a player interface unit, such as a commercially available Bally iView, which may include a touch panel display, wherein the display shown on player console **101** in each of the respective figures may be conventionally generated by a microprocessor, digital signal processor, or controller using coding to generate the respective fields shown. The respective fields or areas of the display may be pressure sensitive to allow a player to transmit requests, inquiries, or commands. In another alternative, there may be keys or buttons that may surround or be situated about the perimeter of the display portion of player console **101**. In an alternative, player console **101** may be conventionally generated on a wireless device, such as a Blackberry cellular phone or a tablet-style laptop computer.

In one or more aspects, player console **101** connects with a gaming apparatus, such as a gaming server or gaming machine, that may include one or more games, such as video games, for example the Blue Spot Bingo game shown in the figures, or electronic card games, such as the Payday poker game shown in the figures. The games may be executed on the gaming server or gaming machine, in which case player console **101** displays the game driven remotely, receives the signals to display the game information, and transmits requests or commands from the player. Player console **101** may have programming imposed restrictions on game play, such as playing thresholds to be achieved by a player prior to the player console game being enabled.

In one or more alternatives, player console **101** may display various games that are available for play, where any of the games may be selected by a player, such as by pressing the surface area in the case of a touch-sensitive display or an adjacent button. The game software may reside on a supporting game processor board which may be connected directly to the display portion of player console **101** or the game software or portions thereof may reside on the console processor board. In one or more alternatives, when a player selects a game, the game software may be transmitted from a server or gaming machine onto the console processor board.

Continuing to refer to FIG. **1**, player console **101** displays a main panel **103** for a bingo game, in the example panel, the game is Blue Spot Bingo. As part of the display panel, a rewards level accumulator **107** is shown which displays the current player reward level, where the reward level is determined by the amount played on the base game. In the example, the player has reached reward level 11 and the rewards level accumulator **107** may be illuminated up to the level achieved. For example, reward level 11 may correspond to an eighty percentile level on the rewards level accumulator

107 and eighty percent of the scale may be illuminated green, while the remaining portion may be unlit. The panel 103 further shows a help area 111 which may be pressed to bring forward an informational display panel that may include the rules for playing the game and a paytable. Also, shown is a name section 113 displaying the name of the current game selected on player console 101 and a central name section 115 with the logo for the game.

The central name section 115 of the main panel 103 may include a perimeter of lights 117 which may illuminate as a player plays a base game and earns sufficient playing points to play the bonus game with player console 101. The base game may be a game that is played in a gaming machine that house player console 101 or it may be any game that a player plays and accumulates points that may be reflected on player console 101. As a player plays one or more base games, the green lights may illuminate sequentially around the perimeter 117 and correspond to playing points accrued by the player. By example, a player may accumulate one player point for every dollar wagered or there may be some other basis connected to the player's wagering. Once all the lights around the perimeter 117 of the central name section 115 have been illuminated, then the player has accumulated sufficient player points to play the bonus game.

The main panel of player console 101 further may include a promotional cash level area 119 providing a display of the promotional cash available to transfer to a game, such as a base game, a player account 121 area that may be touch sensitive to bring forward a player account panel which may contain player points and available funds accessible through a player account which may by example be maintained on a player account server connected over a network with player console 101. The main panel 103 may further include a funds collection area 123 that may bring forward a funds request panel which may allow a player to draw funds down to a base game or gaming machine and be either used for further wagering or cashed out if the funds have no restrictions, such as funds that may be used only for play on one of the games of a casino operator.

The main panel of player console 101 may further include a game selector area or areas 125*a*, 125*b* which may be touch sensitive and enable a player to scroll backward, such as is shown by the area labeled "Last Game" 125*a* referring to a previous game's main panel, or, scroll forward, such as by pressing the area labeled "Next Game" 125*b* to view a next bonus game's main panel from a list of available games.

In addition, the main panel of player console 101 may include a game initiator area 105 with a header, such as "Play Game". The game initiator area 105 may be illuminated when sufficient points have been accrued by a player to play the bonus game. Illumination of the game initiator area 105 may alert a player that the player is eligible to play the bonus game. Alternatively, by pressing the button, the player may initiate the sequence of panels 127*a*, 127*b*, 127*c*, 127*d* shown in FIG. 3 below. At any time before the bonus game begins by selection of the blue spot numbers, a player may return to the main panel of FIG. 1 and browse for other games of interest.

In a further alternative, the player may be required to meet the threshold requirements of FIG. 1 before the player may open the panel shown in FIG. 3A in exchange for the accumulated player points. At which point, the player must continue to play the main game to accumulate additional player points to fully initiate the game sequence shown of panels 127*a*, 127*b*, 127*c*, 127*d* in FIG. 3A-D as described below.

Referring to FIGS. 2A, 2B, and 2C, the main panel 103 (103*a*, 103*b*, 103*c*, 103*d*) of the Blue Spot Bingo game is displayed on player console 101 where the perimeter lights are shown with a beginning string of lights 108*a* illuminated, then a longer string of perimeter lights 108*b* illuminated until all the perimeter lights are illuminated. Simultaneously, the reward level indicator 109*a*, 109*b*, 109*c* (which may be associated with a player point accumulator that may be installed on the console processor board or remotely, such as on a player tracking server) may increase to correspond to threshold levels achieved by a player's play, such as player reward level "1", "2", and "11" shown in the figures as 109*a*, 109*b* and 109*c* respectively, and points accumulated. The perimeter lights may illuminate as playing thresholds are met by the player until all the lights are illuminated. At this point, the "Play Game" area may illuminate to indicate that the game play threshold has been met to play the bonus game and to indicate that the "Play Game" area is enabled so that the player may initiate the bonus game play.

The reward level achieved by a player may be used to determine a paytable associated with the bonus game. Apart from the number of points accrued, the reward level may be determined by denomination played by a player, for example a penny slot machine player may only be able to achieve level '3', whereas, with a nickel denomination slot machine, a player may be able to achieve level "5", and so forth. In addition, the number of coins per line may be a determinant on reward level that may be achieved, so that a player playing the minimum per line may achieve certain levels less than the highest level while a player playing maximum bets per line may achieve the highest reward level.

Referring to FIG. 3A, 3B, 3C, a sequence of panels show the example Blue Spot bingo game from beginning to finish of the game. The initial panel sequence of the bingo bonus game displays each of three bingo cards fully covered, FIG. 3A. In order to uncover the cards for play, the player must continue to play a base game to accumulate points and achieve thresholds which cause a portion of one or more cards to be uncovered (FIG. 3B) until as in FIG. 3C the cards are completely uncovered. The numbers that are selected for the player, are shaded on each card, such as shaded 'blue' to correspond to the name of the bingo game Blue Spot Bingo. The selected numbers on the cards may be selected randomly such as through a program operating the game. Alternatively, the numbers may be selected by a player where the player may be permitted a maximum number of selections on each card. In the example shown, card one and two have only two numbers that are selected and that need to be matched and card three has five numbers that are selected. The bingo numbered balls appear one at a time as they are drawn or simulated to be drawn from a pool of numbers corresponding to a range, such as one through seventy-five. The drawn numbers that match to the numbers on the card are marked, such as by circling as shown in FIG. 3C. Additionally, the matched numbers may be illuminated. If all the shaded numbers on a card are circled, then the player wins the award that is associated with the bingo card. In FIG. 3C, the potential awards for each card are listed above the card which as an example are 12 points, 60 points, and $600, respectively. It may be noted in the example that the cards with the lower potential awards have the least amount of numbers that need to be matched and therefore have the greater likelihood of being a winning card.

The amount of the potential award corresponds to the rewards level, which by example is "4" as shown in the rewards level indicator on the panel of FIG. 3C. In the example, no card had all matching numbers, so the game is over and no award is given to the player and a "Game Over" caption is displayed in the upper display area while the player may continue to see the respective cards for a short period on

FIG. **3**C. After the short period, such as ten seconds, has passed, a panel as shown in FIG. **3**D may be displayed which includes a large game ending placard area displayed across the cards indicating the game is over, for example "***Game Over***". On the game ending placard, a further informational area may be included that may be touch sensitive to enable a player to access the rewards/help panel, which may provide the player with the rules and potential rewards available for the game.

Further referring to FIG. **3**A, **3**B, **3**C, an informational panel may be located at the top and when the game is initially ready to play with all the cards covered, additional information may be provided on the cover of each card, such as "Play Main Game to Reveal Cards", "Main Game Wagers Increase Reward Levels", and "Mark all Blue Spots on one card to Win". Additionally, on each panel may be a menu button area which may be touch sensitive and allowing a player to restore the main game panel as shown in FIG. **1**.

Referring to FIG. **4**A, **4**B, panels **400**, **402** are shown that may be displayed when a player presses the help or rewards/help buttons shown in FIG. **3**C or FIG. **1**. In the example, FIG. **4**A displays the initial help screen and provides the rules of the game, such as the name of the game (the current example figure has the incorrect name a the top of the help screen, it should be "Blue Spot Bingo"), the requirements for the player to be eligible to play the game by playing a main game to uncover the bingo cards, the requirement that each of the blue spots on a card must be matched by the drawn bingo ball numbers to be a winner and that there can be more than one winning card, an instruction that the player may touch the menu button to collect any winnings. The help panel **400** also may include a touch sensitive rewards button and a close button. By pressing the rewards button, a reward panel **402** as in FIG. **4**B may be displayed to inform a player of the rewards for each of the bingo cards that may be obtained in accordance with the rewards level. For example, FIG. **4**B shows the rewards for level one for each of the cards one, two, and three to be two points, ten points, and one hundred dollars, respectively. In addition to touch sensitive help and close buttons, an arrows button is displayed which enables a player to scroll through each of the levels and corresponding rewards. The close button enables a player to request the main game panel to be displayed.

Referring to FIGS. **5**A, **5**B, and **5**C, a second game, Payday Poker is shown, via panels **500**, **502**, **504** which has similar functional aspects as described above with respect to the Blue Spot Bingo game. As in FIG. **1**, FIG. **5**A has a perimeter light area about the central game name display area where portions of the lights are illuminated as the player plays a base game, accumulates player points, and achieves thresholds. Once the perimeter lights are fully illuminated the "Play Game" button may be illuminated and activated so that the player may initiate the initial game sequence which is a panel such as shown in FIG. **5**B where there are five card places which are initially empty. As the player plays the base game and achieves thresholds, a covered card begins to appear until it is complete, then a next card begins to appear as the player continues to play and achieve thresholds. In the FIG. **5**B example, the player has achieved a number of thresholds and has acquired or drawn three complete covered cards and has partially met the needed thresholds to obtain the fourth card. When the player has obtained five covered cards, the hand is complete and then each card may be sequentially uncovered to show the player what hand of cards has been drawn, the process of uncovering the cards being shown in FIG. **5**C. The process of uncovering may be automatic or the player may initiate the uncovering by pressing on each card; the cards may only be uncovered after a complete hand has been drawn. In the event that a winning combination has been obtained, then the player may select another panel to collect the winnings, such as by pressing the "Menu" button to return to the main game panel and then pressing the "Collect" button.

Referring to FIGS. **6**A, **6**B, and **6**C, an example main panel **600**, help panel **602**, and rewards panel **604** are shown for the example bonus game Payday Poker. From the main panel **600**, a player may access the help panel **602** by pressing the "Help" button on the main panel **600**. As in the earlier described game, the help panel **602** may provides the name of the game, a description as to how the game is played and the game requirements, an instruction as to how to collect winnings. The help panel **602** may further include touch sensitive "Rewards" and "Close" buttons enabling a player to request the display of the potential rewards for each rewards level or return to the main panel **600**. In the case of the Payday Poker Game, FIG. **6**C, shows the potential rewards, via panel **604** for a player reaching level eleven to include: $5000 for a Royal Flush, $1000 for a Straight Flush, $400 for Four of a Kind, $100 for a Full House, 600 points for a Flush, 400 points for a Straight, 200 points for Three of a Kind, 100 points for Two Pair, and 20 points for Jacks or better. In the example, level eleven is the highest level and the arrow button points left to indicate that the only further selections are at the lower levels.

Referring to FIG. **7**, an example partially shown rewards panel **700** associated with level one and a rewards panel **702** associated with level five illustrate the different potential rewards for the respective levels, such as the potential reward for a Royal Flush for a level one player is $250 while a level five player may receive $2000. As discussed above, various determinants may be utilized to elevate the rewards level, such as points, denomination wagered, and amounts wagered per line.

Referring to FIGS. **8**A, **8**B, and **8**C, example game concluding panels **800**, **802**, **804** are shown with a banner section partially covering the uncovered hand of cards. An upper display section indicates the status of the hand and the banner section indicates whether the player has won an award. In the case of FIG. **8**A, the player has Four of a Kind and is a level 11 player, so the win is $400 and the display indicates "Congratulations you win $400". In the case of FIG. **8**B, the player has a losing hand and the display indicates "Game Over" and "No Win". In the case of FIG. **8**C, the player has a Flush which is shown in the upper display window and the banner displays "Congratulations you Won $10+240 points". To return to the main screen, the players may simply press the "Menu" button. Alternatively, an additional button may appear such as a "Collect Winnings" touch sensitive panel as part of the banner, FIG. **8**A or the banner may have a "Rewards/Help" touch sensitive panel, FIG. **8**C.

Referring to FIGS. **9**A-**1** through **9**B-**2**, a sequence flow of panels **900**, **902**, **904**, **906** is shown by example for a player to collect cash winnings. In the example shown, Bally Live Rewards may be cashed out from the main game panel by pressing the touch sensitive "Collect" button. By example, cash winnings shown in the main display panel may be transferred to the base game through an electronic funds transfer. Alternatively, a player may leave cash winnings in a player account until another gaming session. As shown, when the player presses the "Collect" button, a panel is displayed for entering the player's personal identification number (PIN). If the PIN is correct, then a panel is displayed requesting the player to enter the amount to be collected. By default, the total amount in the player's account may appear on the display. The player may withdraw any portion thereof. Once the trans-

action is complete, the player may be returned to a main menu screen. In the event that the transaction fails after multiple attempts, the player may be provided a "Call Attendant" button or a "Continue Playing" button.

Referring to FIG. **10**, a sequence of advertising panels **1000**, **1002**, **1004** is shown that may be displayed when player console **101** has been inactive for a period of time, such as when no game points are being accumulated by a player. Alternatively, the advertising panels **1000**, **1002**, **1004** may appear when an associated base game has been inactive for a pre-determined period of time, such as five minutes. In another alternative, an associated base game may be active, but a player may not have been identified, such as with a playing card, and the advertising panels **1000**, **1002**, **1004** may be shown. The advertising panels **1000**, **1002**, **1004** may provide information apprising a player how to participate in the bonus games, how to achieve reward levels, and how to initiate game play by achieving the thresholds of play through playing points.

Referring to FIGS. **11**A and **11**B, a block diagram and front view of example gaming machine **1100** are shown, respectively. Gaming machine **1100** may include apparatus and/or software for implementing one or more player-centric rewards processes as discussed above and in accordance with one or more embodiments. Typically, gaming machine **1100** is implemented as an electronically functional device using conventional personal computer technology with few or no moving parts; however gaming machine **1100** may also be implemented as an electro-mechanical or mechanical device.

For example, gaming machine **1100** as shown in FIGS. **11**A and **11**B may include a game printed circuit board including game processor **1110**, memory **1115** which may store the game machine operating system and game presentation software **1120**, network interface **1125** for connecting to an operator's network, video display **1130** which may display a game driven by processor **1110** and may have fields for example displaying player credits, wager, win amount, etc., user input devices **1135** which may provide buttons or video fields for a user to communicate with gaming machine **1100** through processor **1110**, user card interface **1140** which may provide a device for transmitting player card information to processor **1110**, and peripheral devices **1145** such as a bill acceptor or ticket dispenser, etc.

In the example of a video gaming machine, game processor **1110** communicatively connects to video display **1130** which displays images of reels that function equivalently as mechanical or electro-mechanical reels, user interface unit including user input devices **1135** which provides information to a patron and permits patron communications with the game processor and/or a network connected through network interface **1125**, user card interface **1140** which provides a device for receiving and reading player card information, and peripheral devices **1145**, such as a bill reader for receiving and reading various bill denominations, coupons, and/or credit vouchers, and, a voucher printer which may be combined with the bill reader and may print credit vouchers when a patron wishes to cash out and/or print rewards vouchers when a patron accepts an award.

Video display **1130** may be any of a variety of conventional displays, such as a high resolution LCD flat panel, and may have touch screen display functionality so that a patron can make software-enabled selections which may be associated with the game. Apart from its conventional functionality in presenting a game for a patron, gaming machine **1100** may include award software which may be stored in memory **1115** and hardware which may be part of or connected to the game board to implement one or more player-centric rewards processes as disclosed above by example. Video display **1130** may include a separate user display such as an LCD touch screen display with interactive capability for communication between a user, gaming machine **1100**, or a network connectable through network interface **1125**.

Memory **1120** may include both memory internal and external to processor **1110**. External memory may include a hard drive, flash memory, random access memory (RAM), read only memory (ROM), and any other conventional memory associable with a printed circuit board.

In the event that gaming machine **1100** is connected to a network, then the rewards software and hardware may be implemented wholly or partly externally and may be communicatively connected to the user interface unit for notifying patrons of rewards and receiving patron communications, such as award acceptances. For instance, gaming machine **1100** may have a game management unit (GMU) which connects to a slot management (SMS) and/or casino management (CMS) network system. The GMU may in turn connect to the game board and the user interface unit. The player-centric rewards may be driven through the GMU, either directly or indirectly through the SMS and/or CMS which is discussed more fully below.

Referring to FIGS. **11**A and **11**B, typically, gaming machine **1100**, such as Bally's S9000 Video Slot machine, comprises microprocessor **1110**, such as an Intel Pentium-class microprocessor, and non-volatile memory **1115** operable to store a gaming operating system, such as Bally's Alpha OS, and one or more gaming presentations **1120**, such as Bally's Blazing 7's or Bonus Times for example, operable and connected on a printed circuit motherboard with conventional ports and connections for interfacing with various devices and controlling the operation of gaming machine **1100**. Memory **1115** may store one or more software modules operable with the OS to implement one or more reward processes, such as are described above in relation to FIG. **1-10**.

Gaming machine **1100** may include network interface **1125** operable to download one or more gaming presentations **1120** from the one or more gaming servers (not shown) and to otherwise communicate with networked devices and servers for various purposes; however, one or more player-centric award processes as described above by example may be implemented with or without network support depending on implementations as is described further below. Gaming machine **1100** may further comprise a video display **1130**, through which gaming presentations are presented to the user; however, electro-mechanically driven reels may be implemented in place of or together with video display **1130**. Gaming machine **1100** may further comprise user interface devices **1135**, such as a keyboard (not shown) which may be used to enter a pin number or for the selection of various options, various player selectable buttons **1137** including bet one, bet all and the like, as well as a touch screen which may be incorporated with video display **1130** or display **1139**, such as an iView TFT display. Gaming machine **1100** also includes user card interface **1140**, which is operable to accept a user card that identifies a user as a casino patron to the gaming environment. Gaming machine **1100** may further include one or more peripheral devices **1145**, such as a bill/ticket acceptor, ticket printer, and various other devices. As shown in FIG. **11**B, user card interface **1140** and peripheral devices **1145**, such as a bill acceptor may be implemented adjacent to each other or may be part of the same housing structure while connecting differently to perform their respective functions. In the event a network connection exists, then the user interface unit may provide a communication link for a patron with an SMS and/or CMS network.

In one or more embodiments, gaming machine **1100** includes microprocessor **1110**, which may implement the programming logic of the gaming presentations and control the operation of various hardware and software components of the gaming machine, as well as, one or more peripheral devices **1145**. For example, microprocessor **1110** may be operable to activate various components of the gaming machine **1100** and, in the event of a network connection, to download one or more gaming presentations **1120** from the gaming server. In response to a user input to initiate play and the placement of a wager, the microprocessor **1110** may be configured to retrieve the requested gaming presentation **1120** from memory **1115** and to commence the play of the game. The microprocessor **1110** may be configured to randomly select a game outcome from a plurality of possible outcomes and to cause the video display **1130** to depict indicia representative of the selected game outcome. In the case of slots, for example, mechanical or simulated slot reels may be rotated and stopped to display symbols on the reels in visual association with one or more pay lines. If the selected outcome is one of the winning outcomes defined by a pay table, the microprocessor **1110** may be configured to award the player with a number of credits associated with the winning outcome. Conventionally, in such gaming machines, a player may wager multiple credits on one or more lines depending upon the programming or physical limitations of the gaming machine.

In one or more embodiments, gaming machine **1100** includes user input devices **1135**, which may include various gaming controls, such as standard or game-specific push-buttons, a "bet" button for wagering, a "play" button for commencing play, a "collect" button for cashing out, a "help" button for viewing a help screen, a "pay table" button for viewing the pay table(s), a "call attendant" button for calling an attendant, and a "rewards button" for viewing player reward information and accepting various rewards, such as opportunities to play bonus games and obtain additional player awards. User input devices **135** may also include various game-specific buttons known to those skilled in the art. User input devices **1135** may also include a keyboard, a pointing device, such as a mouse or a trackball, or any other input devices. In one or more embodiments, user input devices **1135** may also comprise an embedded additional user interface (not depicted), such as an iView™ interface, as described in commonly owned U.S. patent application Ser. No. 10/943,771, entitled USER INTERFACE SYSTEM AND METHOD FOR A GAMING MACHINE, which is hereby incorporated in its entirety by reference herein. The content provided through the embedded additional user interface may include, for example, advertisements, promotion notifications, useful gaming information, user rewards information and any other content that may be of interest to the casino patron.

In one or more embodiments, the gaming machine **1100** also includes user card interface **1140**, which is operative to accept user cards containing the patron's identification information, such as the patron's ID number. User interface **1140** may be configured to accept magnetic cards, smart (chip) cards, electronic keys and the like. It will be appreciated, however, that such user information may be stored in other forms or on other media for subsequent retrieval. For example, the user information can be stored on an RFID device, electronic key, or other portable memory device. Likewise, using biometrics or other techniques, user information may be retrieved from the game machine or from a remote storage device via a network. In an example embodiment, the system may recognize three different levels of user cards. For example, level one cards may identify frequent casino patrons, i.e., those who have a well-established history of playing at the given casino and/or whose wagering at the casino exceeds a specified threshold amount. Therefore, level one patrons will be entitled to the greatest degree of service, various promotions and rewards from the casino since they have met or exceeded a game threshold. The level two cards may identify patrons who frequent the casino, but whose spending at the casino is not as extensive as those of the level one card holders. Lastly, the level three cards may identify new casino patrons, i.e., those who do not yet have a consistent history of playing at the given casino. The degree of service, promotions and rewards offered to the level two and level three card holders likely will differ from that offered to the level one card holders, as will be described in a greater detail hereinbelow. The gaming system may be configured to recognize fewer or greater numbers of card levels, and that promotions and/or credits associated with each card level may differ.

In one or more embodiments, gaming machine **1100** includes one or more peripheral devices **1145**. For example, peripheral devices **1145** may include a player identification device, such as a magnetic card reader that accepts a player-identification card issued by the casino. Peripheral devices **1145** may also include a credit receiving device, such as a coin acceptor, a bill acceptor, a ticket reader, and a card reader, which may be used for placing wagers. The bill acceptor and the ticket reader may be combined into a single unit. The card reader may, for example, accept magnetic cards, such as credit cards, debit cards, and smart (chip) cards coded, i.e., cards loaded with credits or that designate an account for use via the gaming machine **1100**.

According to the methodology of various example embodiments, a patron may insert a player card to provide identification information to gaming machine **1100**. A player-centric rewards process, such as disclosed above, may be implemented through a player-centric rewards program stored on permanent storage accessible by the game processor or other local processor, such as a processor connected to a Bally iView or similar unit, and activated by a signal from the card reader. The player-centric rewards program may be a program or programs that may implement the process described by FIG. **1-10** through execution by processor **1110** on the motherboard or by a processor on the user interface board of gaming machine **1100**.

The information from the card reader may be processed through a subroutine to determine player eligibility for player-centric rewards. If the player is determined to be eligible, then the program may provide a display of a main bonus game panel on player console **101** which may be integrated as part of the display **1139**. The program may accumulate player points based on play of the base game, such as may be displayed on display **1130**, or receive the player point information from another processor, such as game processor **1110**, a GTM processor, or an external processor such as a server processor. As the player reaches pre-determined thresholds, the bonus game may be selected by the player and the game process may proceed as described above with regards to FIG. **1-10**. In accordance with the program processing, the patron player level may be determined based on the current and/or previous gaming sessions, a set of potential prizes or prize levels may be determined for which the patron's player level is eligible, and the potential awards for the bonus game may be determined based on the achieved player level. In an alternative embodiment, the patron's player level may be identified at the beginning of play and the potential bonus game awards may be determined for which the patron's player level

is eligible, gaming machine **1100** may display a message viewable by patron showing the reward level for which the patron is eligible. Gaming machine **1100** may also provide encouragement to the patron to win an award and achieving higher award levels by displaying entertaining video images and/or providing audible messages, such as cheerleaders making a 'GO' cheer and/or displaying a fireworks display when pre-programmed threshold levels of play are met by a player.

Upon determining a reward level that is to be offered to the patron, then an instruction from the player-centric award program may direct the processor to transmit a notification to the patron, such as by displaying an informational message on display **1130** or **1139** advising the patron that he has qualified for an award level and providing the patron with one or more options for responding to the notification, such as that the player may have accumulated sufficient points to play a bonus game or encouraging the player to play additionally in order to achieve the needed player point level or to increase the player's reward level. Thereafter, the player may view display **1139** and make selections as to a bonus game as previously described with respect to FIG. **1-10**. When the patron completes play, as by removing the player card from the card reader, then the player points may be stored so that the player may add to the player points during a future session.

In one or more example alternative embodiments, a player's player points, wager amounts per line, and denomination wagered may be stored in temporary storage, such as by example one or more registers of a game microprocessor, a player interface microprocessor, digital signal processor, or controller associated with a player interface such as a Bally iView, or a processor associated with a Bally GMU or GTM which may be communicatively connected to the game motherboard and the player interface. Alternatively, the temporary storage may comprise an onboard (motherboard or daughter board) conventional memory, such as random access memory (RAM), or, an off-board connected conventional memory, such as a conventional hard-drive, or, a connected printed circuit board with a conventional processor, controller, and/or memory. The temporary storage values may be utilized to determine thresholds achieved and/or rewards level of an eligible patron during a gaming session. The respective processor controlling the temporary storage location may accumulate player points based on the number of credits wagered in accordance with a player reward program, such as one which may include an instruction set to implement a type of player-centric award process as described above with respect to FIG. **1-10**. After each play, the player points and other player-centric data may be used to evaluate whether a threshold has been met or whether a reward level has changed in accordance with the programmed player-centric award procedure executed by game processor. When the player points either equal or exceed the required threshold to play a selected bonus game, then the patron may then play the bonus game and vie for one or more of the potential player awards. The programmed player-centric award procedure may then initiate a subroutine to play the game and determine an award to be offered to the player. The player point will be deducted from the player's account and the player may again begin accumulating player points for the next bonus game opportunity. Once the processor determines the award to be offered, then the procedure instruction set may include an instruction for the game processor to send an award notification to the patron through, by example, display **1130** or display **1139**, or by printing a voucher redeemable at one of the operator facilities providing patron services. In the event of a display notification, the patron may by example be provided the option of having a redeemable voucher printed or, in the case of a cash award, of having credits uploaded onto the credit meter for further play on gaming machine **1100**. Alternatively, the game processor may cause an electronic award record to be created and transmitted to a data location associable with and accessible on behalf of the patron. Such a data location may be a permanent storage connected to the gaming machine or may be a memory stick or magnetic strip connected to the patron's player card. In the case of records being stored on a patron's player card, a patron may access the award by utilizing a machine readable device for dispensing rewards or by presenting the patron's player card to an operator's representative, such as at a cashier's cage.

In one or more alternative embodiments, a player's accumulated player points may be obtained from information stored or machine readably inscribed on or about patron's player card through the use of user card interface **1140** which may have a receptacle to receive player cards or may have a scanner enabling a proximity scan of the information on the patron's player card. The patron's player card may contain the information such as through the use of a memory strip. In such cases, user card interface may have a read-write capability to enable writing the ending state for the player points and/or reward levels at the time the patron concludes play on a given gaming session. Thus, a patron may play different gaming machines and play at different times while retaining the state of the patron's player points and rewards level and being able to continue to accumulate player points during each gaming session without losing the totals and levels reached from the prior session.

Alternatively, when the patron completes play at a given gaming machine, as by removing the player card from the gaming machine card reader, then the player points and/or rewards level may be reset to their zero or initial value. In other words, there is no retained state that is saved at the end of a gaming session for the purpose of bonus game eligibility. Also, the player points will be re-initialized after each instance where the patron reaches the threshold to play a bonus game and the player determines to play the bonus.

Referring to FIG. **12**A, a simple block diagram of rewards server **1250** connecting over network **1206** to representative example gaming machine **1100** is shown. Processing engine **1255** may comprise a conventional personal computer, such as an Intel or AMD microprocessor-based computer, or, any other conventionally available computers capable of performing general purpose computing and gaming specific applications, such as Dell, Sun Microsystems or IBM computers. Databases, such as databases **1260**, **1265**, may comprise one or more conventional hard drives or other storage media for storing patron records which may be written, updated, and accessed through processing engine **1255**, and, for storing programs executable by processing engine **1255**. The stored programs may include one or more procedures, subroutines, or sets of coding for performing or enabling player-centric rewards processing such as are outlined in the description of FIG. **1-10**. For connecting the various devices, such as servers at the back-end and gaming machines **1100** at the front end, network fabric **1206** may include, but is not limited to, an IP-based local area network backbone, such as Ethernet. As may be appreciated, other functionally comparable network backbones may be utilized.

For instance, in an example system such as is shown in FIG. **12**A, gaming machine **1100** may utilize network interface **1125** to connect with rewards server **1250** through network **1206**. A player card connectable through user card interface **1140** to gaming machine **1100** may contain sufficient information which when read such as by user card interface **1140**

may be used to identify a player at gaming machine **1100** either directly from the information stored on the card and/or by transmitting player card identification information to query a network-connected server and database containing player records such as rewards server **1250** or a separate player tracking server (not shown) and accessing a patron's player records remotely. Once the patron's records have been accessed, a query may be sent to rewards server **1250** either from gaming machine **1100**, a player tracking server, a host computer connected to various servers connected to the network, or other conventional network communicating device inquiring whether the patron is eligible to receive a player-centric reward, such as a bonus game. Responsive to the query, rewards server **1250** may transmit a patron reward message to gaming machine **1100** which may cause a message and/or video to be displayed for viewing by the patron on either an iView-type display, a main display, or other information medium, for example a speaker, apprising the patron of an available reward, possibility of a reward based on continued play, and/or providing an entertaining audio and/or video transmission.

In one example embodiment, the patron's player records including current player points and reward level may be downloaded to gaming machine **1100** from rewards server **1250**, a player tracking server (not shown), or some other networked computer and/or database. As the patron proceeds to play, the player points and/or rewards level may be incremented or decremented as discussed more fully above until the player points matches or exceeds the threshold required to play the selected bonus game, at which point, the patron may become eligible for a player-centric award as discussed more fully above. As also discussed above, the patron's information may be utilized to compare against possible player-centric rewards, such as a bonus game, to determine the patron's eligibility. In another embodiment, the player points and/or rewards level may be maintained and updated on a server, such that as a patron plays, information is sent to the server concerning each play and the player points and rewards level are incremented or decremented in accordance with a procedure such as is shown and discussed more fully above with reference to FIG. **1-10**.

In the case of a network-connected player database and/or server accessible by one or more gaming machines **1100** as through network interface **1125** over network **1206**, an operator may identify and rate players, either through direct data input or conventional software designed to perform the identification and rating functions on a host computer or player tracking server based upon play over a period of time. Based upon the player rating, a procedure may be implemented as with a computer module executed by rewards server processing engine **1255** that associates ratings of players with operator determined tiered player levels and according to the tiered player levels establishes eligibility for player-centric rewards as discussed above. The eligibility information may by example be stored according to player tier levels or on an individual player basis, in a player tracking database which may be updated either in real-time or on a periodic basis through the player tracking server. When a player inserts a player card or otherwise identifies themself, a gaming machine may access and utilize the information stored on the networked system to determine the eligibility of a player for player-centric rewards. In the case where the player-centric rewards bonus program resides on the gaming machine, then it may begin execution upon determining that the player at the gaming machine is eligible and requests to play the game.

Alternatively, the player-centric rewards bonus program may reside on a server, such as rewards server **1250**, remote from gaming machine **1100**. In which case, gaming machine **1100** may simply provide the incrementing and comparison functions, and transmit a message to the server when the threshold is met for an award to be offered to a patron. For instance, when a player is identified at a gaming machine as eligible for player-centric rewards, then the player-centric rewards bonus program may begin executing such as through processing engine **1255**. The instruction set may include sending a message to gaming machine **300** to set and increment a player point counter in accordance with play by the eligible player and to send a message to the server, for example, when the player points reach or exceed one or more thresholds associated with the bonus game.

In another alternative, the gaming machine may provide game play information on a real-time basis to the server which may perform the incrementing and comparison functions, as well as the rewards processing. Upon the server executing a bonus game and determining an award to be offered, the server may create and store a record which may be associated with the patron's player information and may also send a message to gaming machine **1100** to notify a patron of the award offer. In the case of an award, a patron may be required to make a collect request as by pressing a 'collect' button or key and/or by entering a personal identification number (PIN). Alternatively, in each case discussed above, an award may simply be automatically credited to gaming machine **1100** without any further action required by the patron. Conditions may or may not be included with an award or award offer, such as that the patron utilize or redeem the award within a period of time which may be determined by an operator.

Continuing to refer to FIG. **12**A, in one or more embodiments, user input devices **1235** may include a processor, memory, and associated components as may be implemented on a printed circuit board and the player points and reward level of a player may be received by this circuitry and related software for decrementing or incrementing as the case may be upon each play by the patron. In these example implementations, the wager information may be passed from microprocessor **1110** or another processor with access to wagering information, in accordance with an instruction from the processor in order that the player points and/or rewards level be correctly adjusted.

In one or more example embodiments, a game monitoring processor unit, such as a Bally game monitoring unit (GMU), may be implemented separate from microprocessor **1110** and the processor that may be included with user input devices **1135**, such as Bally's iView, but may be connected to both for receipt of gaming information and player information, respectively. In these example implementations, the player points and/or rewards level may be maintained with the game monitoring processor unit and the wager information will be passed to it from or in accordance with an instruction from microprocessor **1110**.

In each of the examples described above, the player points and/or rewards level may be incremented or decremented by a gaming and/or one or more related processors incorporating programming to effect steps, such as in accordance with the processes described by example with respect to FIG. **1-10**. When the pre-determined number of plays is reached by the patron then a signal may be sent to display **1139** (FIG. **11**B) (incorporated with user input devices **1135**) and a celebratory show may be presented to the patron from a memory (which may be part of user input devices **1135** or otherwise stored on gaming machine **1100**) to apprise the patron that the patron is eligible for an award. In the case, where gaming machine **1100** is not network connected, then the bonus game program

may be initiated to determine whether the player wins and what award the patron may receive, such as player points and/or cash awards.

Continuing to refer to FIG. **12**A, rewards server **1250** includes processing engine **1255** which may communicatively connect to sweepstake database **1260** and birthday database **1265**. As shown, gaming machine **1100** may include network interface **1125**, such as one or more conventional network PCMCIA cards or a Bally ACSC NT-board, GMU, or GTM, to facilitate IP-based or address-based communication of some form with other networked devices, such as the rewards server **1250** and the like. Through the network, microprocessor **1110** may communicate with rewards server **1250** to facilitate execution of various rewards transactions. In one or more embodiments, the network interface **1125** may be used to download one or more gaming presentations or other software and/or data from the gaming server. To facilitate placement of wagers using a credit or debit card through a credit card reader (not shown) that may be connected to gaming machine **1100** as by example through user input devices **1135**, user card interface **1140**, and/or peripheral devices **1145**, network interface **1125** may be used to communicate with a banking server (not depicted), which connects to a financial institution that has issued the financial card, conduct a credit card authentication process, and then credit the requested amount to gaming machine **1100**. The accounting server issues credit confirmation to gaming machine **1100**, which in turn allows the casino patron to place the desired wager on the machine and to proceed with the game. In a progressive gaming network environment, where several gaming machines **1100** compete for a single jackpot prize, the network interface **1125** may be used to communicate with other gaming machines **1100**, as well as with a game monitoring server (not depicted) to synchronize a jackpot value and other parameters.

Referring to FIG. **12**B, networked gaming system **1201** is shown in accordance with one or more aspects of the invention wherein banks **1203** of gaming machines **1100** are connected to router **1205**, router **1205** connects to router server **1207** and multiple backend subsystems **1209** including player-centric rewards programming enabling the executing of slot process jobs **1211**. By example, networked gaming system **1201** may be conventionally architected such as with conventional Bally gaming machines and a conventionally available ACSC SMS and CMS products implemented with the IBM iSeries products with modifications to selected portions of the player tracking software to incorporate the player-centric rewards such as those described above with respect to FIG. **1-10**.

Routers **1205**, such as a conventionally available Bally ACSC Game Net device, may be programmed to consolidate gaming data and other communications from respective bank **1203** of gaming machines **1100** into packets and to transmit the packets according to the routers programming to game net server **1207** and/or pre-determined portions of multiple backend systems **1209**. Routers **1205** may receive a notification of each transaction at their respective banks **1203**, modify the information prior to transmission to router server **1207**, such as a conventionally available Bally ACSC Game Net server, and selected portions of multiple backend subsystems **1209** according to router **1205** programming. For example, when a patron inserts the patron's card in a card reader of gaming machine **1100**, the information is read from the player card and transmitted to router **1205** which in turn sends the player information to selected portions of multiple backend subsystems **1209** and a query may be made whether the patron is eligible for a player-centric reward, such as a bonus game. Additionally, upon a patron playing sufficiently to match the bonus game's requisite player points, router **1205** connected to the respective player's gaming machine **1100** may be programmed to transmit a message to a rewards server, such as shown in FIG. **12**A, which may be implemented as part of multiple backend subsystems **1209**.

Multiple backend systems **1209**, such as may be conventionally architected using Bally's ACSC SMS and CMS iSeries-based products, may be programmed to process player-centric slot process jobs **1211**. The iSeries-based products implemented in the Bally architecture may include i5 server **1213**, which are originally manufactured by IBM and programmed by Bally to perform networked gaming systems functions. Amongst the programming that may be implemented may be player-centric rewards programming to perform the steps described in the figures and description herein. To accomplish various networked gaming systems functions including player-centric rewards processing, multiple backend systems **1209** may include slot accounting system (SLT) **1215**, slot marketing system (SMS) **1217**, and casino management and accounting system (CMS) **41219**. Each of the respective systems may be under the centralized control of a host computer the function of which may be performed by i5 server **1213**. Additionally the respective functions of systems **1215**, **1217**, **1219** may be implemented through programming of separate servers or a single server such i5 server **1213**. A workstation (not shown) may connect to i5 server **1213** and may include a conventional display, keyboard, and mouse enabling an operator (user) to run respective programs associated with systems **1215**, **1217**, **1219** and modify the operation of the respective systems through the selection of various options such as player-centric rewards criteria. For example, upon a patron inserting a player card into a gaming machine **1100** connected to networked gaming system **1201**, a message may be sent to i5 server **1213** that contains patron information and initiates one or more slot process jobs **1211** according to the programming of i5 server **1213** to determine whether the patron is eligible to play a bonus game.

Programming of i5 series **1213** may be triggered upon receipt of the patron information that includes sending selected patron information and a query to slot marketing system **1217**. In parallel, series **1213** may send patron and gaming machine **1100** identifying information and a transaction report to slot accounting system **1215**. On determination of a patron's eligibility for a birthday reward, SMS **1217** may send a message to CMS **1219** to make a record of the transaction and a message may also be sent from multiple backend systems **1209** to gaming machine **1100** notifying the patron of the birthday reward. Similarly, slot process jobs **1211** may be initiated on i5 series **1213** upon a patron meeting the playing criteria for eligibility for one or more player-centric rewards, such as Bally Live Rewards.

One or more aspects are described in the following example discussion as may relate to the system and rewards shown in the figures:

What is Live Rewards?

Live Rewards lets you offer carded players exciting bonus games through your existing iVIEW-equipped slot machines. This remarkable advancement in technology creates a thrilling gaming experience designed specifically to increase wagering activity. Once a Player's Club card is inserted into the slot machine, each bet on the base game brings the player closer to earning bonus game play. Once the minimum game play requirements have been met, the bonus game either starts automatically or the player can press a button to start the game. Bonus game winnings can be awarded in cash (to be transferred to the base game through an electronic funds

transfer) or in bonus points. Live Rewards bonus games require base game play; they cannot be played directly. Live Rewards uses high-resolution, animated graphics, quality sound, and a touch-screen display to provide players with bonus game content. This content is managed by the Live Rewards Server (LRS) through the Windows-based Live Rewards management application. There are currently two bonus games available through Live Rewards: Blue Spot Bingo and Payday Poker.

About the Player Interface

The Live Rewards user interface runs on the iVIEW display, allowing customers to play bonus games and transfer their cash winnings to the base game. Players can choose from two Live Rewards bonus games: Blue Spot Bingo and Payday Poker.

Play Point and Game Play Indicators

Live Rewards has two distinct counters that determine the player's bonus game experience: play points and game start threshold.

Play points are used to determine the pay table used for the bonus game—the more play points a player accrues, the higher the payout amount (equal to one cent for determining prizes on bonus game pay tables) of the corresponding pay table. A play point is defined as one cent of every dollar bet at the base game. This is a pre-set, non-configurable value that has no actual monetary value and cannot be redeemed. The rate at which a player accrues play points is determined by players club membership level and is configured through the Live Rewards Server. Players track play point accrual through the Reward Level indicator on the left-hand side of the screen. As play points are accrued and the reward level increments, the player sees poker chips stack up. When game play begins, the number of play points used for the game is determined by the number of play points accrued minus the number of play points in the highest qualifying Pay table. The game start threshold determines when a player has played enough base games to start a bonus game. For each base game played, the player earns a TC (Threshold Counter), which is depicted on the user interface as a light surrounding the selected game logo. A player earns a TC based on the number of games played the time spent playing, and the maximum bet for each game.

What Are Play Points?

Play Points are the unit currency used by the player to play a Live Rewards game. Play points are earned based on Base Game Wager times and the accrual rate set for each Player's Club level. Play Points have no redeemable value, but are considered to be worth $0.01 for the purpose of deriving the Live Rewards game Pay tables. You cannot adjust this value. Play points are restricted to the play of Live Rewards games and are not cashable. Play Points earned on the iVIEW are transferred to the player's session account on the LRS before any Live Rewards game begins and at player card removal. Play Points are decremented from the player's server account when a Live Rewards game is played.

The amount of Play Points decremented is determined by the amount of Play Point accumulated when the player has played a number of games equal to the Live Rewards Game Start Threshold. The number of Play Points determine, which Pay Table the player receives with the Pay Table that takes the maximum number of earned Play Points being automatically selected. Play Points are awarded only by play of base game and are not awarded by any other means.

The number of Play Points awarded is equal to the product of the following equation:

=[Base Game Wager (in dollars)×Accrual Rate (set by BLRS)]/[Value of Play Points (in dollars)]

Client Side processing of Play Points (PP) and Threshold counters (TC's):

1—On card-in the client may register the player's card number to the iVIEW and receive the values of the reserve account for display purposes.

2—As the player plays the base game PP and TC's may accrue on the client.

3—At Card-out, Recovery start-up, and before a Begin Game is sent to the LIVE REWARDS SERVER all PP and TC accrued on the iVIEW are transferred to the LIVE REWARDS SERVER.

4—When the iVIEW has determined the player has accrued enough TC and PP for a game (combined total of reserve account and remaining PP's and TC's on iVIEW) the iVIEW allows the player the option to start a game. If the player elects to start a game:

a—All PP's and TC's are transferred via 3-stage commit to LIVE REWARDS SERVER.

b—Current totals in reserve account are returned to iVIEW.

c—If total is still acceptable to starting a game iVIEW sends a Begin Game message to LIVE REWARDS SERVER that includes the number of PP's and TC's to be used.

d—Based on server setting send a −1 for TC's to be used may use them all.

e—LIVE REWARDS SERVER sends a response back to the iVIEW that includes a History ID number (HID) and a success or Fail.

f—If Success is returned iVIEW proceeds to play the system game.

g—At game conclusion a End Game messages sent to LIVE REWARDS SERVER Via 2 stage commit (stage 1 of the 3 stages was Begin Game). The end game contains the value of any winnings the player won.

h—Winnings in the End Game are stored in the player's reserve account.

5—Bonus Points (BP's) are immediately transferred to CMS from LIVE REWARDS SERVER.

6—Cash winnings in the reserve account are shown to the player and accessible after Pin-in for AFT transfer from LIVE REWARDS SERVER to the base game.

7—On recovery any PP's, TC's, BP's and cash are transferred to LIVE REWARDS SERVER.

8—On recovery, If a Begin Game was sent and an End game was not completed the End game is sent with a recovery status and the LIVE REWARDS SERVER rolls back the PP's and TC's used for the incomplete game are rolled back into the player's account and any reserve account for this card#/ iVIEW ID is also rolled back into the player's account.

9—If the player is playing slowly and a Begin Game, End Game, or card out has not occurred in (Heartbeat time length—1 minute) the iVIEW sends a heartbeat to the LIVE REWARDS SERVER to keep the player's reserve account reserved.

Referring generally to FIG. **13-22**, authorized casino employees can access Live Rewards information from the iVIEW, as appropriate. The Live Rewards employee functions allow employees to perform maintenance and trouble-shooting tasks from the slot floor. From the iVIEW, an employee can:

view information on the currently installed Live Rewards program, iVIEW and GMU.

view iVIEW settings as defined under Global Settings on the Live Rewards Server.

view individual game play, withdrawal and hand pay records of transactions that occurred at the iVIEW.

clear the iVIEW device's Non-Volatile Random Access Memory (NV-RAM).

remove the iVIEW from service ("un-register").

The chart below refers to fields shown in FIG. **20** and includes report data available at the employee interface at the gaming device:

Field	Description
Buckets Spent	Type and amount of reward for the specified transaction. For example, 100 P.P would be $100.00 in Play Points. Additional reward, or bucket, types are: Threshold Counter, Bonus Points, and Cash
Closed By	Identification number of the employee who completed the Live Rewards hand pay on the slot machine.
Closed Date Time	Date and time hand pay was cleared from the slot machine.
Created Date Time	Date and time slot machine went into hand pay mode.
End Date Time	Date and time specified session is terminated. End date/time format: DD/MM/YYYY HH/MM/SS (AM or PM).
Game	Name of Live Rewards game played during the specified transaction.
Hand pay Type	Reason game has gone to a hand pay: 1 - Winnings exceed jurisdictional limit; 2 - Unable to transfer winnings to the base game.
HID	History Identification Number. A unique sequential number generated by the system. The purpose of the HID is to track game play information, including when play started, when play ended, as well as the associated score, pay level, reward level, buckets spent, and buckets won. This information can also be viewed through the LRS.
iVIEW ID	A unique identification code of the iVIEW device. The iVIEW ID is an alphanumeric value of 50 characters, including special characters.
Player Card #	Player Card Number. A unique 20-character number that is associated with a particular player.
Prizes	Dollar amount of the hand pay.
Prize Value	Dollar amount of the winnings transferred from the LRS to the game.
Reward Level	Name of pay table that was applied to the specified game.
Score	The result of the last played game and the current pay level number.
Session ID	Identification code that is generated for by the system for every session. A session begins at player card in and ends at player card out.
Session Trans #	Transaction number generated by the iVIEW for each withdrawal and deposit that occurs between player card in and player card out.
Start Date Time	Date and time specified session is created. Start date/time format: DD/MM/YYYY HH/MM/SS (AM or PM).
Status	For a hand pay status, indicates hand pay has been Completed, is still Open, or has been Cancelled. For a withdrawal status, indicates withdrawal is pending (Open), has been completed (Success) or could not be completed (Failed).
Trans Date Time	Date and time of the transaction when it was created. The date is in DD/MM/YYYY format, and the time in HH/MM/SS AM or PM format.
Winnings	Dollar amount won during the specified transaction.

Referring to FIG. **13**, an Operator Menu panel **1700** is shown such as may be displayed on an operator interface unit that may be integrated as part of a player interface unit, such as a Bally iView, connected to a gaming machine. The operator interface unit may include the Operator Menu panel **1700** that may be displayed on a touch-sensitive display and a card reader that may receive and read an operator card. Upon insertion of an operator card by a casino operator technician, the operator menu panel **1700** may be displayed. To gain access to the functionality of the menu panel **1700**, the technician may enter a pin number and demonstrate that the person with the card is authorized to access the various menu functions. As shown, a keypad is provided for entering the pin number and to enter numbers associated with the various operator functions, such as 12—Hopper Fill, 13—Proactive Fill, 05-Employee Service Log, 20—View meters, and various Regulatory Functions, such as 63—Tickets Log, 64—Authentication, 70—eCash Log. Additionally, there may be additional keys, such as Bally Live Rewards, About, Center, Help, and Clock. When a function key number is entered on the key pad, a function display area may provide information about the requested function as is associated with the gaming machine. For example, in the function display area where the View Meters key number has been entered, the Mode, Change, Pay, Bet, iView Loaded, iView Load meters/registers names are displayed along with information stored in the meter.

Referring to FIG. **14**, an operator Live Rewards menu panel **1702** is shown such as may be displayed on an operator interface unit. The additional keys on the operator menu panel **1702** provide additional menus for obtaining additional information about the gaming machine and operating system. For example, by pressing the Live Rewards key, an operator Live Rewards menu panel **1702** may be displayed providing an operator with additional key options, such as Machine Details, Device Configurations, Reports, Unregister, Clear NvRam (Non-volatile random access memory), and Exit (to return to the operator menu panel **1700**).

Referring to FIG. **15**, a Machine Details panel **1800** is shown such as may be displayed on an operator interface unit. For example, by pressing the Machine Details key on the operator Live Rewards menu panel **1702**, the machine details panel **1800** may be displayed and provide information, such as iView ID (identification data), Casino ID, Asset Number, GMU (gaming management unit) ID, Client IP address, Server IP address, iView version, LRS (Connected or Unconnected), and GMU=(Registered or Unregistered). The panel **1800** may additionally provide a key for Version Details and Close (to return to the previous menu panel).

Referring to FIG. **16**, a Version Details panel **1802** is shown such as may be displayed on an operator interface unit. For example, by pressing the Version Details key on the Machine Details panel **1800**, the Version Details panel **1802** may be displayed to provide the names of various components associated with the gaming machine, such as Casino Magic Version, Live Rewards Version, NV Logging Version, Payday Poker Version, and Boom Bingo Version, and the associated ID information.

Referring to FIG. **17**, a Help panel **1804** is shown such as may be displayed on an operator interface unit. For example, by pressing the Help key on the Operator Menu panel **1700**, various fields displayed of the associated panels may be listed by name and associated description, such as Asset Number if Slot machine identification number, Casino ID//Unique 3 digit property identifier, Client IP Address//Network address of the iView, GMU ID//Unique identification number of the Game Monitoring Unit assigned by the Slot Management System (such as a Bally SMS) upon initial connection, iView ID//Unique number used to identify the iView device assigned by the manufacturer, iView version//Version of code currently installed on the iView device, LRS//Status of the Live Rewards Server (LRS) that the iView is connected or not connected, GMU=//Status of iView connection to the Game Monitoring Unite (GMU)—Connected or Not Connected, Server IP Address//Network location of the Bally Live Rewards server.

Referring to FIG. **18**, a Device Configuration panel **1900** is shown such as may be displayed on an operator interface unit. For example, by pressing the Device Configuration key on the operator Live Rewards menu panel **1702**, the Device Con-

figuration panel may be displayed and show the iView settings as defined under Global Settings on the Live Rewards Server. The Device Configuration panel **1900** may include Refresh and Close keys. By pressing the Refresh key the most recent settings received by the iView may be displayed.

Referring to FIG. **19**, a second Help panel **1902** is shown such as may be displayed on an operator interface unit. The second Help panel **1902** may be a rollover panel associated with the first Help panel, such as with a scrolling capability, and include Field names and descriptions, such as: Auto-Play System Games//Determines whether a randomly selected Bally Live Rewards game plays automatically once the player has accrued enough play points—this setting is defined through the LRS, under Global Settings; iView SyncInterval// Defines the number of minutes between each iView synchronization with the LRS to download global settings—these settings are defined through the LRS, under Global Settings; Jurisdiction Limit//Indicates the jurisdictional limit for hand-paid jackpots—this setting is defined through the LRS, under Global Settings; System Game Volume for Attract Mode// Volume setting for attract movie—this setting is defined through the LRS, under Global Settings; System Game Volume Game—Volume setting for Bally Live Rewards games—this setting is defined through the LRS, under Global Settings.

Referring to FIG. **20**A, B, C, D, several transaction-related report panels **2000**, **2002**, **2004**, **2006** are shown such as may be displayed on an operator interface unit. A Transaction Main panel **2000** may be displayed by pressing the Reports key. The Transaction Main panel **2000** may include a Withdrawal Transactions, Hand pay Transactions, and Gameplay Transactions keys. By pressing each of the respective keys, a panel may be displayed corresponding to a Withdrawal Transactions **2002**, Hand pay Transactions **2004** and Gameplay Transactions panel **2006**.

Referring to FIG. **21**A, B, two Unregister panels **2100**, **2102** are shown such as may be displayed on an operator interface unit to unregister an iView apparatus from the gaming network as for example when a gaming machine is removed from the casino floor.

Referring to FIG. **22**, an NV Ram clear panel **2200** is shown such as may be displayed on an operator interface unit to erase the non-volatile random access memory of a gaming machine.

Referring to FIG. **23**, a Main iView display **2300** is shown such as may be displayed on a player interface unit to display a player's accumulated bonus points and a countdown for qualifying to play a reward game. The Main iView display may include Play Games, Service Request and ePromo keys. Once the player qualifies, the Play Game key may allow a player to activate a reward game. FIG. **23** is a screenshot of the Player Page shown to the player after a valid player card insertion at the Player Tracking panel. The player can select ePromo (funds transfers to the gaming device), Service Request, or Play Games and enter the live Rewards gaming portal on the iVIEW. If the player selects the Play Games button then they will be taken to the Live Rewards Game Console where they can select from multiple games. If the player earns enough play points and threshold counter points then they will automatically be taken from this screen and the default game will be auto-played. This is to ensure that a player gets their bonus game even if they don't touch the user interface at all. When a player exits the Live Rewards page by Pressing Player account this is the page they return to. This is the default page that a carded in player would see during their session.

Referring generally to FIG. **24-56**, the Live Rewards Management Application enables:

activate, control and registers iVIEW devices.

store player information related to Live Rewards.

set up the rules for accessing Live Rewards.

assign different reward criteria to different player types.

control the types of winnings available to the player (cash or bonus points).

manage bonus game Pay tables.

generate reports related to Live Rewards activity.

Getting Assistance

Click Contact Info link at the bottom of any screen. The Contact Info screen may provide contact information as well as office locations worldwide for service related assistance, such as from the manufacturer.

Referring to FIG. **24**, an Activate iView panel **2400** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel, connected to a server network, such as a Bally SMS & CMS. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Activate iView panel may include fields for a Casino ID, iView ID, GMU Id, Asset Number, Registered Date, Last Reported Date, and Active. Associated with each field may be data for each of the player interface units that are connected to the system. A closeup view of the panel **2402** is shown in FIG. **24**A.

Activating and De-Activating iVIEW Devices

Each iVIEW may automatically register with the Live Rewards application when it boots for the first time and sends a registration message to the LRS for activation. Once the iVIEW is activated, it downloads the global settings from the LRS and updates its global settings accordingly. It is then ready to play Live Rewards games. The registration information includes base game data, identification code of Asset, iVIEW, casino and network identification code of the iVIEW device (GMU Id). The LRS requires successful registration of iVIEW prior to any game being played on the specific iVIEW. As a security measure, by default, all games may be deactivated for a specific iVIEW at initial registration and games may be enabled in the LRS for that iVIEW.

In one or more embodiments, iView devices may be separately authorized and un-authorized to play Live Rewards Games. This may be done after registering the iVIEW devices to the slot machines. Plus, the user through the Operator Control Console can also activate and de-activate all iVIEW devices in the casino floor.

The following steps outline a process that may be implemented through conventional coding on the operator control console to activate/de-activate iVIEW devices:

STEP 1. From the Live Rewards Management menu, go to Games Management submenu and select Activate iVIEW. System displays the list of all iVIEW devices and its details.

Following is the list of fields and their description for the Activate iVIEW's For Live Reward Games screen:

Field Name	Description
Casino Id	A unique identification code of the casino. The Casino Id can be an alphanumeric value of 4 characters.
iVIEW Id	A unique identification code of the iVIEW device. The iVIEW Id can be an alphanumeric value of 50 characters including special characters.
Gmu Id	A unique network identification code of the iVIEW device. The Gmu Id can be an alphanumeric value of 32 characters including special characters.

-continued

Field Name	Description
Asset#	A unique identification code of the Slot machine. The Asset# can be an alphanumeric value of 8 characters.
Registered Date	The Registration date of the iVIEW device on the slot machine. The date is in DD/MM/YYYY format, and time in HH/MM/SS format AM or PM format.
Last Reported Date	The last date and time the iVIEW device connected to the LRS. The date is in DD/MM/YYYY format, and time in HH/MM/SS AM or PM format.
Active	This checkbox allows you to activate or deactivate the iVIEW device.

STEP 2. Select/clear the Active checkbox of the required iVIEW devices which has to be activated/de-activated. or, Optionally, to search and then select, the required iVIEW devices, do the following:

A. Type any/both:

iVIEW Id in Search By iVIEW ID field.

Asset number in Asset# field.

B. Click Find.

C. Select/clear the Active checkbox of the required iVIEW devices.

STEP 3. Click Update to update the iVIEW devices according to the selection. System updates and confirms the same by displaying the message as shown below.

STEP 4. Click Activate All to activate all iVIEW devices in the casino floor. System confirms the same by displaying the message as "All iVIEW's Activated Successfully".

STEP 5. Click De-activate All to de-activate all iVIEW devices. System confirms the same by displaying the message as "All iVIEW's De-activated Successfully".

Referring to FIG. **25**, an Assign Games to Player Type panel **2500** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel, connected to a server network, such as a Bally SMS & CMS. A closeup view of the assign games to player type panel **2502** is shown in FIG. **25**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Assign Games to Player Type panel may include fields for a Select Player Type, Game ID, Game Name, Pay Table Set, Notes, Remove, and Add New Game. For each Player Type, such as Silver, Gold, Platinum, the associated available games and paytables may be displayed. The Remov filed permits the operator to remove a game from a selected player type's pool of games that may be played as a rewards game.

Assigning Games to the Player Type

The Player's Club can designate up to three player types, which usually correspond to the amount the player wages in the casino (for example, Silver, Gold and Platinum). Once the Pay table sets are ready, you can assign them to the requisite Live Rewards game and to the player type.

To View Details of Currently Assigned Games

Purpose: To view details of all currently assigned games, Pay Table Sets and winnings for the particular player type.

Procedure: Follow these steps to view the currently assigned games and details of the mapped Pay Table Sets.

STEP 1. From the Live Rewards Management menu, go to Games Management submenu and select Assign Games to Player.

STEP 2. By default, system selects lowest level player type. However, select required Player Type from Select Player Type drop-down list. System displays currently assigned games details, if any, as shown below.

STEP 3. Select required Pay Table Set link. System displays details of the selected Pay Table Set and its winnings as shown below.

STEP 4. Click Close to close this Pay Table Set view.

To Delete a Game

Purpose: To remove and un-assign a game from the player type.

Procedure: Follow these steps to remove the game.

STEP 1. From the Live Rewards Management menu, go to Games Management submenu and select Assign Games to Player.

STEP 2. By default, system selects lowest level player type. However, you can select required Player Type from Select Player Type drop-down list. System displays currently assigned games details, if any.

STEP 3. Click Remove Game link to move out the selected Live Reward game that is currently assigned to any player type. System displays Remove a Game section.

STEP 4. Type Reason for Removing Game (Mandatory).

STEP 5. Click Remove Game from Remove a Game section. System un-assigns and removes the game along with its game settings. It confirms the same by displaying the message as shown below. The game is then available in the LRS, so that you can use it for other player types, if needed.

STEP 6. Optionally, click Close to close Remove a Game section.

Adding Games

Procedure: Follow these steps to add a Live Reward game to the player type.

STEP 1. From the Live Rewards Management menu, go to Games Management submenu and select Assign Games to Player.

STEP 2. By default, system selects lowest level player type. However, select required Player Type from Select Player Type drop-down list. System displays currently assigned games details, if any.

STEP 3. Click Add New Game link. System displays Adding a New Game section as shown below.

STEP 4. Select required Game Name from drop-down list.

STEP 5. Select required Pay Table Set from drop-down list. You can see the same notes in Pay Table Set Notes field, that was entered while creating the selected Pay Table Set. This cannot be altered. Optionally, click View link to view the selected Pay Table's structure and its details.

STEP 6. Type Reason for Adding Game (May be mandatory).

STEP 7. Click Add Game. System assigns the selected player type to the selected Live Reward game and confirms the same by displaying a confirmation message.

STEP 8. Optionally, click Close to close the Adding a New Game section.

Referring generally, to FIG. **26**, **27**, **29**, a Player Management menu is shown on the left of each of the respective panels. The Player Management menu enables a user to select which of the panels and options that are to be accessed. The Player Management menu is all about the Players. You can access/play Live Rewards games only if you have a Player Card. A Player Card is a magnetic striped card that identifies the player. This is encoded with privileges and benefits. When inserted into the card reader, the card is read by the player-tracking system. The server identifies the player, maintains a record of the games played and alerts the player to a rating system. Once the player inserts the card into the card reader, the LRS creates a session for the player after validating the player's card number with the casino management system. When the player takes out the card, the session is closed. In casinos same player cards are sometimes used by multiple

players. Therefore, once a session is closed, the corresponding player's balances are credited to the main account. The player gets back the balances the next time the card is inserted in any other slot machine.

For example: Two players have used the same card for playing Live Rewards games. Therefore, only one account is maintained in the LRS for that player card. For this reason, the LRS creates a separate session for each of these players. All game play details and winnings go to their respective sessions and once the card is removed, all balances are updated in the main account.

In one or more embodiments, at any given point of time, only one Pay table set is mapped to the Live Rewards games in accordance to the player type. There can be any number of player types in the casino that is maintained in their CMS. Live Rewards game features like global settings, start rules, and Pay Table Sets are delineated based on these player types.

Inside the Player Management section of the Live rewards server administration pages is the following feature:

Viewing Active Player Sessions

Purpose: To view the active session details of players (status of the session may be 'Open'). This happens due to any flaw in the iVIEW devices or the slot machines breaking the communication with Live Reward Server. Plus, you can do the following:

View players main account and players session balances.

Cancel pending game play.

Cancel pending hand pay.

Suspend the session.

Close the session.

Procedure: Follow these steps to view active player session details.

STEP 1. From the Live Rewards Management menu, go to Player Management submenu and select Active Player Sessions. System displays list of all player sessions whose status is 'open'. Following is the list of fields, column headers and their description for the Active Player Sessions screen.

STEP 2. Optionally, do the following:

A. Type Player Card Number in Search By Player Card# field to view the session details of a particular player.

B. Click Find or press Enter. System retrieves the details of the specified player card number alone.

Cancel Pending Game Play

If any discrepancy occurs in the iVIEW device while a player is playing Live Rewards game, that is, before the game ends, the player can contact a casino employee to cancel the game play. On canceling, the player gets back the play points into the main account. There can be only one pending game for any iVIEW device and a session.

Purpose: To cancel the pending game play and restore play points spent on playing that game.

Procedure: Follow these steps to cancel the pending game play.

STEP 1. From the Live Rewards Management menu, go to Player Management submenu and select Active Player Sessions. System displays list of all the player sessions whose status is 'open'.

STEP 2. Optionally, do the following:

A. Type Player Card Number in Search By Player Card# field to view the session details of a particular player.

B. Click Find or press Enter. System retrieves the details of the specified player card number alone.

STEP 3. Select required session by clicking Choose link. System displays the selected session's details in Session Details display section. If the selected session has any pending game play, system displays corresponding transaction number in Pending Game play field, else system displays '0' (zero).

Cancel Pending Hand Pay

The canceling of the hand pay may be helpful for the following reasons:

If the iVIEW device is not functioning, when the casino staff collects the IRS form from the player and commits the tax amount.

If the LRS finds some other player card in the iVIEW device other than the players who triggered the hand pay. On informing the appropriate reasons by the player, the casino employee cancels the hand pay and commits the amount collected. There can be only one pending hand pay for any iVIEW device and a session.

Purpose: To cancel a pending hand pay and.

Procedure: Follow these steps to cancel the pending hand pay.

STEP 1. From the Live Rewards Management menu, go to Player Management submenu and select Active Player Sessions. System displays list of all the player sessions whose status is 'open'.

STEP 2. Optionally, do the following:

A. Type Player Card Number in Search By Player Card# field to view the session details of a particular player.

B. Click Find or press Enter. System retrieves the details of the specified player card number alone.

STEP 3. Select required session by clicking Choose link. System displays the selected session's details in Session Details display section. If the selected session has any pending hand pay, system displays corresponding transaction number in Pending hand pay field, else system displays '0' (zero).

Handling Pending Withdrawal

If there occurs any discrepancy in the iVIEW devices during transferring the winnings from the iVIEW devices, or if the transaction fails or locked due to some reasons, player can contact casino employee for assistance. The LRS indicates the identification and amount of transaction in Pending Withdrawal# and Transaction Amount fields respectively. The casino employee enters the amount that got transferred in Commit field.

Purpose: To commit the transaction amount which is pending and deposit the balance amount to the player's account.

Procedure: Follow these steps to commit transaction amount.

STEP 1. From the Live Rewards Management menu, go to Player Management submenu and select Active Player Sessions. System displays list of all the player sessions whose status is 'open'.

STEP 2. Optionally, do the following:

A. Type Player Card Number in Search By Player Card# field to view the session details of a particular player.

B. Click Find or press Enter. System retrieves the details of the specified player card number alone.

STEP 3. Select required session by clicking Choose link. System displays the selected session's details in Session Details display section.

STEP 4. Type transferred amount in Commit_Amount field. The employee finds out the amount transferred by using the slot machine's internal records. NOTE: If the selected session has any pending transaction, system displays corresponding transaction identifier, else system displays '0' (zero).

Suspend Player Session

The Live Rewards management application provides a Session job monitor that runs all time to monitor the func-

tioning of all iVIEW devices across the casino floor. If there are any devices that are not communicating with the LRS, it further detects for any open sessions and suspends those sessions. This session job monitor is an internal service which runs all time and checks for fault in the iVIEW devices every fifteen minutes.

Purpose: To suspend the player session manually, whose status is 'open', if any discrepancy or flaw arises in the iVIEW devices. System credits the winnings of the player to their main account.

Procedure: Follow these steps to suspend the active player session.

STEP 1. From the Live Rewards Management menu, go to Player Management submenu and select Active Player Sessions. System displays list of all the player sessions whose status is 'open'.

STEP 2. Optionally, do the following:

A. Type Player Card Number in Search By Player Card# field to view the session details of a particular player.

B. Click Find or press Enter. System retrieves the details of the specified player card number alone.

STEP 3. Select required session by clicking Choose link. System displays Session Details section. NOTE: If the player card gets struck in the iVIEW device and if the player does not report to the cage, the session job monitor detects this fault and suspends the corresponding player session that is opened. Then the session balances go to the player main account. Player gets the balances on inserting the card into another device.

Close Active Player Session

When the player finds that there is discrepancy in the functioning of iVIEW device, that is, when the iVIEW crashes, the player can collect the cash winnings from cage. The casino employee inspects the transaction and session corresponding to the player card number and, manually closes the corresponding suspended transaction and sessions, end the game. Then the winnings are debited to the player's main account.

Purpose: To close the suspended player sessions.

Procedure: Follow these steps to close the player session.

STEP 1. From the Live Rewards Management menu, go to Player Management submenu and select Active Player Sessions. System displays list of all the player sessions whose status is 'open'.

STEP 2. Optionally, do the following:

A. Type Player Card Number in Search By Player Card# field to view the session details of a particular player.

B. Click Find or press Enter. System retrieves the details of the specified player card number alone.

STEP 3. Select required session by clicking Choose link. System displays Session Details section.

STEP 4. Click Close Session. System suspends the session and you see the confirmation message as 'Session Closed'. NOTE: Any withdrawals, open games, and hand pays may be cleared before closing a session.

Referring to FIG. **26**, a Banned Players panel **2600** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel, connected to a server network, such as a Bally SMS & CMS. A closeup view of the banned players panel **2602** is shown in FIG. **26**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Banned Players panel may include fields for a Search by Player Card Number, Add New Player, Player Card Number, Player Name, Player Type, Reason for adding in Banned List. The Add New Player field provides fields for entering the player information of a banned player not previously listed in the associated database.

Forbidding Players

If the player is violating or abusing any casino policies, promotions or privileges according to the agreement laid between the casino and the Player, then a database may be created to list banned players from playing Live Rewards games. Any user with player management permissions can ban the player. If a player inserts a player card then the Live Rewards server is checked for a banned player flag being set. If so then the player is blocked from playing Live Rewards games entirely.

Procedure: Follow these steps to ban the player.

STEP 1. From the Live Rewards Management menu, go to Player Management submenu and select Banned Players. System displays the list of all banned players.

STEP 2. Click Add New Player link. System displays a section.

STEP 3. Type Player Card Number (May be mandatory).

STEP 4. Click Find. System displays Player Name and Player Type in the respective fields. This allows the user to verify that the correct player is being banned.

STEP 5. Type reason for banning the player in Reason for adding in Banned List field (May be mandatory).

STEP 6. Click Save. System saves the record after validating the specified Player Card Number and displays the confirmation message as shown below. If the specified Player Card Number is not found in the LRS application which is connected to the casino's CMS/CMP application, then the system displays an error message as shown below.

STEP 7. Optionally, click Close to close the Add New Player section.

Querying a Banned Player

Procedure: Follow these steps to find a player and its details in the banned player list.

STEP 1. From the Live Rewards Management menu, go to Player Management submenu and select Banned Players. System displays the list of all banned players.

STEP 2. Type Player Card Number in Search By Player Card# (This may be a mandatory input).

STEP 3. Click Find. System displays the details of the banned player as shown below.

Permitting the Prohibited Players

Purpose: To allow the banned players to play the Live Rewards games. Any user (casino staff) logged in to the application can do this task.

Procedure: Follow these steps to remove the player from banned list.

STEP 1. From the Live Rewards Management menu, go to Player Management submenu and select Banned Players.

STEP 2. Type Player Card Number in Search By Player Card# (This may be a mandatory input).

STEP 3. Click Find. System displays the details of the banned player in grids.

STEP 4. Click Remove Player link. System displays the selected Player Card# in a section.

STEP 5. Type reason for removing the player from the list of banned players in Reason for deleting from Banned List field (This may be a mandatory input).

STEP 6. Click Remove Player. System removes the player from the banned list and displays the confirmation message as shown below.

STEP 7. Optionally, click Close to close the Remove Player section.

Referring to FIG. **27**, a Clear Player PIN Lockout panel **2700** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel, connected to

a server network, such as a Bally SMS & CMS. FIG. **27**A illustrates a closeup view of panel **2710**. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Clear Player PIN Lockout panel may include fields for a Enter Player Card Number, Player Name, and Clear PIN Lock. The Enter Player Card Number field provides an input area for entering a card number and a Find field for sending a request to search the database for the Player Name and Player Type. Upon locating the player, the Clear PIN Lock field may be activated to clear the player lockout.

Clear PIN Lockout

Purpose: If the player enters an incorrect PIN multiple times and exceeds the limit set in the global settings, the player's account is locked for a time period. With the "Clear PIN Lockout" screen, you can unlock the player's account by allowing them to try again.

Procedure: Follow these steps to unlock the player's account.

STEP 1. From the Live Rewards Management menu, go to Player Management submenu and select Clear PIN Lockout.

STEP 2. Type player card number in Enter Player Card# field (May be mandatory).

STEP 3. Click Find. System displays Player Name and Player Type in the respective fields If the specified Player's account is locked, only then the Clear PIN Lock is enabled. Plus, system displays an notification message as "Player Not Locked".

STEP 4. Click Clear PIN Lock. System unlocks the specified player's account and displays a confirmation message.

Referring to FIG. **28**, a Copy Pay Table Sets panel **2800** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel, connected to a server network, such as a Bally SMS & CMS. A closeup view of the pay table sets panel **2802** is shown in FIG. **28**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Copy Pay Table Sets panel may include fields for a Choose, Game ID, Game Name, Player Type, Pay Table Set Name, Notes, Copy, View and a New Pay Table Set area including fields for Pay Table Set Name, Player Type, Notes. By selecting the Choose field the associated Pay Table Set Name may populate the New Pay Table Set. The Player Type may be selected for the New Pay Table Set.

Copying Pay Table Sets

Purpose: To copy the existing Pay table set as a template, so you can alter and assign it according to your current requirements.

Procedure: Follow these steps to copy Pay table set.

STEP 1. From the Live Rewards Management menu, go to Play Tables submenu and select Copy Pay Table Sets. The system displays all the existing Pay table sets. (Following is the list of fields and their description for the Copy Pay Table Sets screen.)

STEP 2. Click Choose to select a Pay table set. The system displays Pay Table Set Name, Player Type and Notes in the New Pay Table Set section.

STEP 3. Type the new Pay table Set Name [Mandatory]. This should be unique. The maximum length is 30 characters (including spaces and special characters).

STEP 4. Select your required Player Type from the drop-down list.

Referring to FIG. **29**, a Debit/Credit Player Account panel **2900** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel, connected to a server network, such as a Bally SMS & CMS. A closeup view of the debit/credit player account panel **2902** is shown in FIG. **29**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Debit/Credit Player Account panel may include fields for an Enter Player Card Number, Player Name, Player Type, Bucket, Balance, Jurisdictional Balance, Debit/Credit Player Account, Prize Type, Prize Value, Transaction Type, Reason, and Submit.

Debiting/Crediting Player Account

Purpose: If the casino wants to give promotions to their players, they can credit the winnings (cash or bonus), play points and threshold counter to the player account. Plus, you can also use this application to manage the players account in case of any discrepancy in the iVIEW devices.

Procedure: Follow these steps to debit/credit the player account.

STEP 1. From the Live Rewards Management menu, go to Player Management submenu and select Debit/Credit Player Account.

STEP 2. Type Player Card Number in Enter Player Card# (May be mandatory).

STEP 3. Click Find or press Enter. System displays Player Name, Player Type and the player bucket details along with Jurisdictional balance in the respective fields.

STEP 4. By default, the system selects the Cash Prize Type. However, select required Prize Type from the drop-down list.

STEP 5. Type Prize Value (Mandatory). This may be a numeric value and there is no need to input any currency sign.

STEP 6. By default, system selects transaction type as 'Debit'. However, select required Transaction Type option. NOTE: The system displays an error message as "Player Notfound in Live Rewards Server" if the specified player card number is not found in the LRS, which in turn checks with casino management system.

A casino may decide to give a player free Live Rewards games without any wagering whatsoever. At registration or other time that the casino sees fit they may credit enough Play Points and Threshold counter points into the player account to enable these free bonus games at the iVIEW or other game play device.

Referring to FIG. **30**, a Global Settings panel **3000** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel, connected to a server network, such as a Bally SMS & CMS. A closeup view of the global settings panel **3002** is shown in FIG. **30**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Global Settings panel may include fields for an iView Re-sync Interval, Volume for Live Rewards Game, Volume for Live Rewards Attract mode, Auto-play (On/Off), Invalid PIN Attempts before Lockout, Time to Clear PIN Lockout, Jurisdiction Limit, Reason for Settings Change, Last Modified Date, Modified By, Save Settings, Show Defaults, and Show Current.

Global Settings

Live Rewards game functions based on the global settings. The global settings affect all iVIEW devices on a casino floor.

To View Default Global Settings

Procedure: Follow these steps to view the 's default global Live Rewards settings.

STEP 1. From the Live Rewards Management menu, go to Games Management submenu and select Global Settings. For regulatory purposes, two Administrators, typically managers

having administrative rights, are required to log on to access Games Management submenu and its options.

Set Up Global Settings

Purpose: To view current global settings information and revise global options, use the Global Settings screen. Two Administrator (Admin) users may be logged in to change the global settings.

With this screen you can:

View global settings of the Live Rewards.

Set re-sync time interval, so that iVIEW connects to the LRS after every re-sync interval specified and updates the global settings.

Set speakers volume on iVIEW for attracting players to Live Rewards.

Set speakers volume on iVIEW for game related announcements.

Set invalid PIN attempts, for the number of times a player can enter an incorrect PIN (within the time limit) before the system locks the player's account.

Set time to unlock the Player's PIN giving them a chance to try again.

Set the Jurisdiction limits for the winning amount. A player whose winnings exceeds this value requires a hand payout.

Procedure: Follow these steps to set the global settings.

STEP 1. From the Live Rewards Management menu, go to Games Management submenu and select Global Settings.

STEP 2. Type required re-sync interval (in minutes) in iVIEW Re-Sync Interval field, so that iVIEW connects to the LRS after every re-sync interval specified and downloads these global settings to it (may be mandatory). The default time is 15 minutes. However, this can be set between 0 to 999 minutes (approximately 16 hours 39 minutes).

STEP 3. Type required percentage of volume of the speakers on the analog potentiometers on the iVIEW audio mixer/amplifier board in Volume for Live Rewards Game field for the different types of Live Rewards game (may be mandatory). The minimum percentage is zero and maximum percentage is 100.

STEP 4. Type required percentage of volume of the speakers on the iVIEW in Volume for Live Rewards Attract mode field to attract the players towards Live Rewards game (may be mandatory).

For example, when there are no players on the slot machines, to attract them to the Live Rewards game, some game movie with sounds is played on iVIEW device. The minimum percentage is zero and maximum percentage is 100.

STEP 5. Select Auto-play by clicking the required radio buttons (ON/OFF). If you set Auto-play to ON, iVIEW starts a Live Rewards game automatically for the player once the player accrues the required play points. If the player interacts with the iVIEW player interface in any way, autoplay is deactivated for the remainder of the player session.

STEP 6. Type maximum number of attempts the player can try entering the PIN number in Invalid PIN Attempts before Lockout field before the system locks the player's account (may be mandatory). This may be a numeric value between 0 to 9999. The system prompts for the player's PIN number before transferring cash winnings to the slot machine.

STEP 7. Type time to clear the locked player account in Time to Clear PIN Lockout field (may be mandatory). This is a numeric value between 0 to 999 minutes (approximately 16 hours 39 minutes).

STEP 8. Type Jurisdiction Limit (in dollars). The jurisdiction limit may be set between 0 to 9999 dollars. This is for submitting tax to the government from the players whose combined value of applicable awards for any single game win is over this specified limit for any Live Rewards games.

STEP 9. Type reason for changing the settings in Reason for Settings Change field (may be mandatory). This can be a alphanumeric value of 50 characters including special characters. NOTE: If you specify zero in Time to Clear PIN Lockout field, then the locked account can only be cleared manually. NOTE: The minimum value is 'Zero' and the default value is '$1200'. These global settings are affected only when the iVIEW next connects to the server after the elapse of current re-sync interval and the iVIEW device goes to Attract mode state. After the elapse, system does the following:

Updates the Last Modification Date as current date and time.

Updates the Modified by as logged in User ID.

iVIEW downloads these global settings from LRS after every re-sync interval specified and updates it accordingly. NOTE: Player accounts are maintained in the LRS. If the player wins an award that exceeds the Jurisdictional Limit the Base Game does not tilt. The player has the option to collect the award at their leisure. When a Player opts to collect a Jackpot, player is instructed to press the service button and await a casino employee.

To View Current Global Settings

Procedure: Follow these steps to view the current global Live Rewards settings.

STEP 1. From the Live Rewards Management menu, go to Games Management submenu and select Global Settings.

STEP 2. Click Show Current. System displays the current global settings, which is in function for all iVIEWs across the casino floor as shown below. These settings are in effect for all iVIEWs on the casino floor.

Referring to FIG. **31**, an Import Pay Table Sets panel **3100** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel, connected to a server network, such as a Bally SMS & CMS. A closeup view of the import pay table sets panel **3102** is shown in FIG. **31**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Import Pay Table Sets panel may include fields for a Select Pay Table Set, Browse, Load, and Import. The Select Pay Table Set field provides a field for entering a paytable file. The Browse field enables a user to browse accessible files and directories to locate a particular pay table file. The Load field is activatable upon locating a file to upload the located pay table file. The Import field may be used to Import the identified pay table file to a pay table database.

Referring to FIG. **32**, a Customize-Bonus Game Frequency panel **3200** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel, connected to a server network, such as a Bally SMS & CMS. A closeup view of the live rewards game start rules panel **3202** (an instance of a customization panel **3200**) is shown in FIG. **32**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Customize-Bonus Game Frequency panel may include fields for a Live Rewards Game Start Rules, Select Player Type, Play Point Accrual Rate, Liverewards Game Start Threshold, Rule Number, Rule Description, Number of Occurrences, Increments Start Threshold Counter By Selected Number of Units, Reasons for Settings Change, Last Modified Date, Modified By, Update Settings, and Start Rules Updated Successfully. Associated with the Select Player Type field may be a selectable

area for choosing a player type, such as Silver, Gold, Platinum. Associated with the Play Point Accrual Rate may be an editable field for inserting a number, such as 0.25, where the number may be selected between 0.01-10% of base game wagers. The Live Rewards Game Start Threshold may include an editable field for inserting a number, such as 100, to influence the frequency of Bonus games occurring for this player type.

Set Up the Rules for Accessing Live Rewards

Live Rewards is a Marketing tool. Only if you play the base games you can get the Live Rewards game. This is basically for promotion to increase the revenue for the base games. The more you bet, more the chances for getting the Live Rewards game.

Purpose: To set up the conditions for accessing/playing the Live Rewards game on iVIEW device. These conditions are set for each player type. This allows the casino to determine how often a player plays a Live rewards game and how fast the player earns Play Points. Two Administrator (Admin) users may be logged in to set the rules for accessing Live Rewards game.

Procedure: Follow these steps to set up the rules.

STEP 1. From the Live Rewards Management menu, go to Games Management submenu and select Live Rewards Start Rules.

STEP 2. Select Player Type from Select Player Type drop-down list.

STEP 3. Type accrual rate (in percentage, Mandatory) of base game wagers in Play Point Accrual Rate. This can be within 0.01% to 10.00%. Accrual Rate is the percentage of base game played to be accumulated as play points. For example, if you bet 100 dollars in slot game and the accrual rate is set as 0.25%, then, Play Points=$100×0.0025/$0.01=25. You accrue 25 play points.

STEP 4. Type Live Rewards Game Start Threshold (Mandatory). This may be a numeric value greater than zero. System Game start threshold is a counter to access a Live Rewards. This allows to set the length of time between Live Reward games.

For example, if you have accrued 25 threshold counters by playing base game and the threshold is set to 75, then you may have to accrue 50 more threshold counters to access Live Rewards. The threshold counter for the player increases based on the rules defined in the Rule Table (see below). These rules determine how the player earns Threshold Counters. The table below explains these Rules:

Rule Number	Rule Description	Explanation
01	Base Game [Normal Play]	A single play on the slot machine for any wager amount. This is when you hit the Spin button on a slot machine.
02	Base Game [Max Bet]	For a maximum wager, when you hit the Maximum button on the slot machine or manually max out the bet on a base game and initiate play.
03	Session Time	If you play the base game for a length of time, for example 30 minutes.
04	Session Continuation Time (in minutes)	If you continue to play the base game more than a session, for example 5 minutes.

STEP 5. For the rules 1 to 4 in the Rule Table, do the following:

A. Type required number of occurrences for the corresponding rule in # of Occurrences column. This should be a numeric value and the minimum is zero. This may be a numeric value greater than or equal to zero. Setting a value to zero means that this rule may not be in effect.

B. Type required number of threshold counters that gets added to player account in Increments Start Threshold counter by field. This should be a numeric value and the minimum is zero. This may be a numeric value greater than or equal to zero.

For example: If base game, "Normal Play" and "Max Bet" both have the # of Occurrences set to 1 and they both have the increments counter by value set to 1, then:

If the player places a Normal bet they may receive 1 threshold counter.

If they made a Max bet they would receive 2 total counters, 1 for the normal bet and 1 for the max bet.

STEP 6. For regulatory purposes, type Reason for Settings Change (May be mandatory).

STEP 7. Click Update Settings. System updates the settings and confirms the same by displaying the message as shown below. These start rules settings are affected only when the iVIEW connects to the server after the elapse of current re-sync interval. After the elapse, system does the following:

Updates the Last Modification Date as current date and time.

Updates the Modified by as logged in User ID.

iVIEW downloads these start rules from the LRS after every re-sync interval specified and updates it accordingly.

Pay tables in the Live Rewards Management Application

Pay tables determine what a player wins for a given outcome of a game. In the Live Rewards, each game is assigned its own Pay table set for each Player's Club level. The Pay table set has many different individual Pay tables within it, which allows the player to spend more play points for a single game for the opportunity to win a greater prize. Pay tables are represented as "Reward Levels" on the Live Rewards game screens.

Each Pay table has several pay levels that define the winning combination of the game. The more the money you bet on base game, more the play points you accrue and richer the Pay table you get. You can have as many Pay table sets as you want in the Live Rewards Server. Provides default Pay table sets for each type of Live Rewards. Later, a Pay table set can be duplicated and altered to meet the requirements. However, the default Pay table cannot be altered. A Pay table set can used by a Live Rewards game, it can be altered.

The Pay table is an XML document containing reward information based on three factors:

Game Name

Pay table Entry

Game Score

All game Pay tables can be adjusted to suit your requirements. Each game Pay table set is independent of the other. Players playing in dollar machine and penny machine gets the Live Rewards at same time but the player at dollar slot machine gets richer Pay table than the player at penny slot machine. Provides default Pay tables for each type of Live Rewards games. These are imported into the LRS (live rewards server) during installation along with the game settings. It is up to the game designer to decide the winning combinations for the game, to decide different pay levels. So, there can be multiple pay levels and hence the pay lines for a Pay table. Thus, in one or more embodiments, you can change the game by setting up the payout for a game. A user can duplicate and alter these Pay tables for different payouts of the game, but cannot delete or change the defaults.

A Pay table set is a collection of Pay tables. You cannot alter or delete those Pay table sets that have been used for Live Rewards games.

The initial Live Rewards games have 100% Pay tables, as these are directly linked to game play. Statistically and over time, Live Rewards winnings equal the sum of the Play Points wagered on the Live Rewards games (assuming no Play Point expiration and removal from player accounts.)

Two Administrator (Admin) users may be logged on to access the following Pay Tables Menu Options:

Copy Pay Table Sets

Modify Pay Table Sets

Manage Pay Table Sets

Import Pay Table Sets

Generally, the pay levels or winning probabilities for any Pay table may not be changed by a casino operator as there may be regulatory or other concerns. If a casino operator wants to have such changes made then the manufacturer of the system, such a Bally Technologies should be contacted.

Referring to FIG. **33**, a Logon panel **3300** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Logon panel may include fields for a Primary User and a Secondary User where each field may include an input area for a User ID and Password, and a Login and Close field. A Notice field may further be displayed to provide explanatory information, such as "Secondary User is required to View/Change Administration & User Authorization menus."

Referring to FIGS. **34** and **35**, a Manage Pay Table Sets panel **3400** (and **3500**) is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Manage Pay Table Sets panel may include fields for a Player Type, Game, Current Pay Table Set, Select New Pay Table Set, New Pay Table Set Notes, Current Pay Table Summary, and Reason for Activating. The Current Pay Table Summary may include fields for the Pay Table Name, Threshold, Level, Score, Win Probability, Prize, $ Value, Quantity, $ Total.

Re-Assigning Pay Table Sets

Purpose: To assign the Live Reward game to a new Pay table set, depending on the player type. This overrides the currently assigned Pay table set. In other words, there can be only one Pay table set active for one Live Rewards game for a given player.

Procedure: Follow these steps to re-allot a Pay table set for the game and the player type.

STEP 1. From the Live Rewards Management menu, go to Play Tables submenu and select Manage Pay Table Sets.

STEP 2. Select required Player Type from drop-down list.

STEP 3. Select required Game from drop-down list. System displays currently assigned Pay table set for the game and the player type in Current Pay Table Set field.

STEP 4. Select a new Pay table set from Select New Pay Table Set drop-down list. The system displays the comments entered in the New Pay Table Set Notes field when the Pay table set was imported/copied/modified.

STEP 5. Type your comments for re-allotting in Reason for Activating field. In one or more embodiments, any Pay table set that has been assigned to a particular game and player type cannot be re-assigned to another game or some other player type. Click View to view the details of currently assigned Pay table set. This link is adjacent to Current Pay Table Set field. The system displays only those Pay table sets which can be used for re-assigning in Select New Pay Table Set field.

Deleting Pay Table Sets

Purpose: To delete a Pay table set. In other words, to delete all Pay tables that belong to a set. However, for auditing purposes, you cannot delete the used and provided Pay table sets.

Purpose: Follow these steps to delete a Pay table set.

STEP 1. From the Live Rewards Management menu, go to Play Tables submenu and select Modify Pay Table Sets.

STEP 2. Select required Player Type from drop-down list.

STEP 3. Select required Game from drop-down list. System displays currently assigned Pay table set for the game and the player type in Current Pay Table Set field.

STEP 4. Select a Pay table set from Select New Pay Table Set drop-down list.

STEP 5. Click Delete. System deletes the selected Pay table set and displays a confirmation message, Pay Table Set Deleted Successfully. Click View to view the details of currently assigned Pay table set. This link is adjacent to Current Pay Table Set field. In one or more embodiments, those Pay tables which have been used for any Live Rewards games cannot be deleted.

Referring to FIG. **36**, a Modify Pay Table Sets panel **3600** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. A closeup view of the modify pay table sets panel **3602** is shown in FIG. **36**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Modify Pay Table Sets panel may include fields for a Player Type, Game, Select Pay Table Set, Pay Table Set Notes, Pay Tables in the Pay Table Set, Threshold, Game Settings, View Game Settings, Pay out % and Pay out table. The Pay out table may include fields for Card Level, Win Probability, Cash, Bonus Points, $ Total (adding cash & dollar value of bonus points). Additional fields may be included for Update, Delete, Calculate (the % pay outs), and Informational, such as "Note: You can't modify this Pay table set. This Pay table set already used for the Live Reward Games."

Modifying Pay Table Sets

Purpose: To change the details of replicated Pay table set according to your current requirements. Plus, you can change, calculate and view the new payout percentage on the basis of cash amount and bonus points of each pay level of the Pay table.

Procedure: Follow these steps to change the values of Pay table set and to calculate payout percentage.

STEP 1. From the Live Rewards Management menu, go to Pay Tables submenu and select Modify Pay Table Sets. Following is the list of fields and their description for the Modify Pay Table Sets screen. In one or more embodiments, those Pay table sets which have not yet been activated for a Live Reward game may be modified by a casino operator.

STEP 2. Select required Game from drop-down list. System displays the mapped player type in Player Type field.

STEP 3. Select required Pay table set from Select Pay Table Set drop-down list.

System displays following details of the selected game and Pay table set:

Comments entered in Pay Table Set Notes field while the Pay table set was copied/imported/modified.

List of all Pay tables of the selected Pay table set under Pay Tables in the Pay Table Set section.

Game Settings: The predefined set of rules or mechanics established for a Live Reward game by the game designers. These settings are loaded at the time of LRS installation.

Payout Percentage. This is different for each Pay table. This tells how much the game is paying back to you.

By default, system displays subsequent details of the first Pay table—

Threshold value

Different Pay levels

Win probability

Cash

Bonus Points, and

Total

If you have selected a Pay table set that has been used for any Live Reward game, the system displays the warning message: You can't modify this Pay Table Set. This Pay Table Set already used for the Live Reward Games. Click View Game Settings link, if you want to view the game settings of the selected game. System displays the same in a separate window. The buttons Update, Delete, Calculate and Create New Pay Table may be enabled only if you can modify the values of the Pay table set.

STEP 4. Click the required Pay table link from the Pay-.Tables in the Pay Table Set section. Pay tables are numbered and arranged in ascending order relating to threshold of a Pay table. On clicking, the system displays the play point value, winning probability, cash, bonus points and total corresponding to the list of all Pay Levels of the selected Pay table.

STEP 5. Optionally, you can change the Play Point value according to your requirements, which effects the current Payout percentage. This may be greater than zero.

STEP 6. Type following for the corresponding pay level, if required in PAY OUT section of the screen:

Amount to be given as cash winnings, if the player attains a particular pay level in Cash column. By default, system takes cash as 'zero'.

Bonus points to be given as bonus points winnings, if the player attains a particular pay level in Bonus Points column. By default, system takes bonus points as 'zero'.

STEP 7. Click Calculate to view and have an idea of the updated payout percentage and total winnings based on the current values you have entered for the selected Pay table. Total is the addition of Cash and Bonus Points for each pay level. The number in brackets is the number of play points needed to earn the Pay table.

Field Name	Description
Game	This is a drop-down list which displays the list of all Bally Live Reward games that are available in the casino.
Player Type	The description/name of the player type.
Select Pay Table Set	This is a drop-down list which displays the list of all paytable sets.
Pay Table Set Notes	The comments entered while the paytable set was imported/copied/modified (for example, the purpose of the new Paytable set).
Threshold	The number of play points required to obtain the corresponding paytable. This is the cost of the paytable. This must be a numeric value greater than or equal to zero, which can accept four decimal values.
Game Settings	The predefined set of rules or mechanics established for a Bally Live Reward game by the game designers. This is loaded during installation in XML format.

-continued

Field Name	Description
Level	List of all Pay Levels for a defined paytable.
WinProb	Winning probability of the corresponding pay level.
Cash	Amount that can be won when the player attains the corresponding pay level. This must be a numeric value greater than or equal to zero.
Bonus Points	Count of points that can be earned when the player reaches the corresponding pay level. This must be a numeric value greater than or equal to zero.
Total	System calculates and displays the total dollar value of the corresponding cash bonus points for each pay level.

Referring to FIG. **37**, a Customizing the Pay Tables panel **3700** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. A closeup view of the customizing pay tables panel **3702** is shown in FIG. **37**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Customizing the Pay Tables panel may include fields for a Player Type, Game, Select Pay Table Set, Pay Table Set Notes, Pay Tables in the Pay Table Set, Threshold, Game Settings, View Game Settings, Pay out % and Pay out table. The Pay out table may include fields for Level (Winning Combination), Win Probability, Cash Pay out, Bonus Points Pay out, $ Total Pay out (adding cash & dollar value of bonus points). Additional fields may be included for Update, Delete, Calculate (the % pay outs), and Create a New Pay table.

Purpose: To create a Pay table within an existing Pay table set.

Procedure: Follow these steps to create a Pay table.

STEP 1. From the Live Rewards Management menu, go to Play Tables submenu and select Modify Pay Table Sets.

STEP 2. Select required Game from drop-down list. System displays the mapped player type in Player Type field.

STEP 3. Select a Pay table set from the Select Pay Table Set drop-down list. System displays corresponding details of the selected game and Pay table set.

STEP 4. Click Create New Pay Table. System displays Creating New Pay Table section.

STEP 5. Select required Pay table from the Select Existing Pay Table drop-down list. System displays the Threshold value of the selected Pay table.

STEP 6. Type Pay Table Name for the new Pay table to be created (May be mandatory, may be unique).

STEP 7. Type Multiplier value (Mandatory). Thus, a newly created Pay table has a play point value equal to selected Pay table's play point cost, multiplied by the value you have entered. This may be a numeric value greater than or equal to zero. The newly created Pay table automatically multiplies all awards from the template Pay table by the multiple value. These awards can then be manually altered to suit your needs.

STEP 8. Click Create. System creates a Pay table and displays a confirmation message, New Pay Table Created Successfully. In one or more embodiments, a Pay table set that has been utilized for Live Reward games may not be modified.

Deleting a Pay Table from its Set

Purpose: To remove a Pay table from its Pay table set.

Procedure: Follow these steps to delete a Pay table.

STEP 1. From the Live Rewards Management menu, go to Play Tables submenu and select Modify Pay Table Sets.

STEP 2. Select required Game from drop-down list. System displays the mapped player type in Player Type field.

STEP 3. Select required Pay table Set from Select Pay Table Set drop-down list. System displays corresponding details of the selected game and Pay table set.

STEP 4. Click the required Pay Table link from the Pay-.Tables in the Pay Table Set section. System displays the play point value, winning probability, cash amount, bonus points and total dollar value of the rewards, corresponding to the list of all Pay Levels of the selected Pay table.

STEP 5. Click Delete. System removes the selected Pay table from its set and displays a confirmation message as shown below. In one or more embodiments, Pay tables from those Pay table sets that are not yet used for Live Rewards games may be deleted. You can notice the deletion of Pay Table9 from the pay table set.

Exporting Pay Table Sets

Purpose: To export a Pay table set into XML format. This can be used by game designers as a reference for defining the game settings and structure while creating new Pay table sets.

Procedure: Follow these steps to export a Pay table set.

STEP 1. From the Live Rewards Management menu, go to Play Tables submenu and select Modify Pay Table Sets.

STEP 2. Select required Player Type from drop-down list.

STEP 3. Select required Game from drop-down list. System displays currently assigned Pay table set for the game and the player type in Current Pay Table Set field.

STEP 4. Select new Pay table set from Select New Pay Table Set drop-down list. System displays the comments entered in New Pay Table Set Notes field when the Pay table set was imported/copied/modified. STEP 5. Click Export. System displays File Download dialog box.

A. Click Open to view the structure of selected Pay table set in XML format. System displays the same in a separate window.

B. Click Save to save the selected Pay table set in XML format. System opens Save As dialog box. Save the file in required location.

C. Click Cancel to cancel the export task. Click View link to view the details of currently assigned Pay table set. This link is adjacent to Current Pay Table Set field.

Importing Pay Table Set

Purpose: To import a Pay Table Set into Live Rewards server application. This may be in XML format. This adds the Pay Table set to the database which is available for copying, modifying, and assigning it to the Live Reward game.

Procedure: Follow these steps to import a Pay Table Set.

STEP 1. From the Live Rewards Management menu, go to Play Tables submenu and select Import Pay Table Sets.

STEP 2. Type path where you have kept the Pay Table Set (in XML format) to be imported in Select Pay Table Set (XML file) field. or, Click Browse to locate the required file name.

STEP 3. Click Load. System displays the contents of the file in a text field that appears shaded (in grey color) as shown below.

STEP 4. Click Import. The system imports the Pay table set into the LRS and displays the confirmation message, Pay Table Sets Imported Successfully. If you have specified a Pay table set that was already imported, the system displays an error message that the given game settings already exist.

Referring to FIG. **38**, a Player Session Activity panel is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. A closeup view of the player session activity panel **3802** is shown in FIG. **38**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Player Session Activity panel may include fields for a Dates Between, Player Card Number, and Show. The Dates Between and Player Card Number fields including editable areas for inputting the associated data, such as beginning and ending date and time and/or a player card number, respectively. The Player Session Activity panel also includes an area to display the requested data, such as information concerning each of the playing sessions of card holder xyz between a specified range of dates. The data display area may include fields, such as View Details, Session ID, iView ID, Start Date Time, End Date Time, Cash Start Value, Cash End Value, Bonus Points Start Value, Bonus Points End Value, Play Points Start Value, Play Points End Value, Threshold Counter Start Value, Threshold Counter End Value. The View Details field may have one or more activatable areas associated with specific sessions, each of which may be activatable to obtain the details of an associated player session.

Viewing Player Sessions

Purpose: To view historical player session details for a particular player card number. Plus, you can view the following player associated bucket details:

1. Player Buckets

Details regarding total winnings classified broadly as balances on the following:

Cash

Bonus points

Play points, and

Threshold counter.

In a casino, one player card is used by multiple players, so there can be many sessions for a single player card.

2. Session Deposits

Session-wise deposit details of the players. In other words, it displays all the transactions which are credited to the player card account.

Procedure: Follow these steps to view player session details.

STEP 1. From the Live Rewards Management menu, go to Player Management submenu and select Player Session Details.

STEP 2. By default, the system selects date and time as per the settings in Report Configuration screen. However, you can select required date (in Dates Between fields) and time period (in Time fields).

STEP 3. Type Player Card Number (May be mandatory).

STEP 4. Click Show or press Enter. System retrieves the details of the specified player card number.

STEP 5. Click Select under the View Details column to view player-associated transaction details for a particular session. By default, System displays the session deposits of the specified player.

STEP 6. Click the following links:

A. Session Withdrawals to view session-wise withdrawals of the specified player card Number.

B. Session Games to view the details on games played during each session for the specified player card number.

Following is the list of fields, column headers and their description for the Player Session Activity screen:

Field Name	Description
Dates Between, Time	Start date, time and end date, time. You can select date range (Month and day) and time range (Hours, Minutes, Seconds)

-continued

Field Name	Description
	from the drop-down list. The end date should be greater than the start date. Start Date, Time Dates Between September 02 10 00 00 < > < > < > < > < > End Date, Time And September 02 10 00 00 < > < > < > < > < >
Player Card #	Player Card Number. It is a unique code to identify the player. The player card number can be an alphanumeric value of 20 characters.
Sessionid/Session #	This is the identification code which is generated by the system for every session.
iViewId	A unique identification code of the iView device. The iView ID can be an alphanumeric value of 50 characters including special characters.
StartDateTime	The date and time when a particular session begins. The start date is in DD/MM/YYYY format and time in HH/MM/SS AM or PM format.
EndDateTime	The date and time when a particular session ends. The end date is in DD/MM/YYYY format and time in HH/MM/SS AM or PM format.
CashStartVaule ($)	The total amount in the player's account when session starts. This must be a numeric value greater than or equal to zero.
CashEndVaule ($)	The total amount in the player's account when session ends. This must be a numeric value greater than or equal to zero.
Bonus Points Start Value	The total number of bonus points maintained in the player's account when session starts. This must be a numeric value greater than or equal to zero.
Bonus Points End Value	The balance bonus points in the player's account when session ends. This must be a numeric value greater than or equal to zero.
Play Points End Value	The balance play points in the player's account when session ends. This must be a numeric value greater than or equal to zero.
Threshold Counter Start Value	The total number of threshold counter in the player's account when session starts. This must be a numeric value greater than or equal to zero.
Threshold Counter End Value	The balance threshold counter in the player's account when session ends. This must be a numeric value greater than or equal to zero.
Session Deposits and Session Withdrawals	
Tran#	The identification number of the transaction generated automatically by the system.
TransactionDateTime	The date and time of the transaction when it was created. The date is in DD/MM/YYYY format, and time in HH/MM/SS AM or PM format.
Source	Source of the transaction. The possible values are: ALL Session Bucket iView Game Play Partial Withdrawal Hand Pay Live Rewards Server

-continued

Field Name	Description
SourceId	A unique identification code of the source. The possible source and their identifiers are: Session Bucket: The identification code of the session, Session ID. iView: The identification code of the iView device, iView ID. Game Play: The identification code of the Live Reward game, GameHistory ID. Partial Withdrawal: The identification code of the transaction, Transaction ID. Hand Pay Live Rewards Server
SourceDetails	A short description of the source.
Bucket	Type of the bucket/reward subject to the transaction. The possible values are: Play Points Threshold Counter Bonus Points Cash
Value	Amount of the transaction. This must be zero or greater than zero.
Jurisdiction	Jurisdiction condition of the transaction. Possible values are 'Yes' and 'No'
Status	Status of the Transaction. Possible values are: Committed Open Rollback
Session Games	
HID	The game play history number. This is a unique sequential number that is generated by the system.
GameName	The name of the Bally Live Reward game. The game name can be an alphanumeric value of 50 characters including special characters.
iViewId	A unique identification code of the iView device. The iView Id can be an alphanumeric value of 50 characters including special characters.
CasinoId	A unique identification code of the casino. The Casino Id can be an alphanumeric value of 4 characters.
GmuId	The network identification code of the iView device. The Gmu Id can be an alphanumeric value of 32 characters including special characters.
Asset#	A unique identification code of the slot machine. The Asset# can be an alphanumeric value of 8 characters.
StartDateTime	The date and time when a particular Bally Live Reward game begins. The start date is in DD/MM/YYYY format and time in HH/MM/SS AM or PM format.
EndDateTime	The date and time when a particular Bally Live Reward game ends. The end date is in DD/MM/YYYY format and time in HH/MM/SS AM or PM format.
Score	This is the result of last played game and the current pay level number from descending.
Status	Status of the Transaction. Possible values are: Committed Open Rollback
Pending HID	Pending game history identification number. If a game is pending on the iView device, HID will be non-zero so that you can cancel the game play.
Pending Withdrawal #	There could be only one pending withdrawal for any iView device and/or for any session. System displays '0', if the pending withdrawal is cleared, else the identification number of that transaction.

-continued

Field Name	Description
Pending Gameplay	There could be only one pending game or any iView device and/or for any session. System displays '0', if there are no pending game for the particular session, else the identification number of that transaction.
Pending Handpay	There could be only one pending handpay or any iView device and/or for any session. System displays '0', if there are no pending handpay for the particular session, else the identification number of that transaction.
Transaction_Amount	Amount of the transaction. This must be a numeric value greater than or equal to zero.
Commit_Amount	The amount that has been credited in the player's account. The commit amount

Referring to FIG. **39**, a Player Session Activity panel **3900** is shown with a Session Deposits Details display such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. A closeup view of the player session activity panel **3902** is shown in FIG. **39**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Player Session Activity panel with Session Deposits Details may be obtained by selecting a View Details for a player session identified the Player Session Activity panel **3800** of FIG. **38**. The Player Session Activity Panel may be displayed in an area including fields for Session Deposits, Session Withdrawals, Session Games, and Close. Another field may be displayed upon selection of one or more of the aforenamed fields, for example a Session Deposits display area is shown in FIG. **39** and may include fields for a Session Number, Transaction Number, Transaction Date Time, Source (such as iView or Game Play), Source ID, Source Details, Bucket, Value, Jurisdiction, and Status.

Referring to FIG. **40**, a Player Session Activity panel **4000** is shown with a Session Withdrawals Details display such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. A closeup view of the player session activity panel **4002** is shown in FIG. **40**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Player Session Activity panel **4000** with Session Withdrawals Details may be obtained by selecting a View Details for a player session identified the Player Session Activity panel **3800** of FIG. **38**. The Player Session Activity Panel **4000** may be displayed in an area including fields for Session Deposits, Session Withdrawals, Session Games, and Close. Another field may be displayed upon selection of one or more of the aforenamed fields, for example a Session Withdrawals display area is shown in FIG. **40** and may include fields for a Session Number, Transaction Number, Transaction Date Time, Source (such as Game Play), Source ID, Source Details, Bucket, Value, Jurisdiction, and Status.

Each withdrawal transaction to the player account for an actively playing player is shown in the display area for a selected session. For example: if you spend your accrued play points, it gets debited from your player card account or if your cash winnings are transferred from the iVIEW to the slot machine, it gets debited from your Live Rewards account and credited to your main player account on the casino management system or onto the slot machine itself.

The following are the fields available on the above-referenced screen (panel):

Field Name	Description
Source	Source of the transaction. The possible values are: ALL Session Bucket iView Game Play Partial Withdrawal Hand Pay Live Rewards Server
SourceId	A unique identification code of the source. The possible source and their identifiers are: Session Bucket: The identification code of the session, Session ID. iView: The identification code of the iView device, iView ID. Game Play: The identification code of the Live Reward game, GameHistory ID. Partial Withdrawal: The identification code of the transaction, Transaction ID. Hand Pay Live Rewards Server
SourceDetails	A short description of the source.
Bucket	Type of the bucket/reward subject to the transaction. The possible values are: Play Points Threshold Counter Bonus Points Cash
Value	Amount of the transaction. This must be zero or greater than zero.
Jurisdiction	Jurisdiction condition of the transaction. Possible values are 'Yes' and 'No'
Status	Status of the Transaction. Possible values are: Committed Open Rollback
Session Games	

Referring to FIG. **41**, a Player Session Activity panel **4100** is shown with a Session Games Details display such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. A player session activity panel **4102** is shown in FIG. **41**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Player Session Activity panel **4100** with Session Games Details may be obtained by selecting a View Details for a player session identified the Player Session Activity panel **3800** of FIG. **38**. The Player Session Activity Panel **4100** may be displayed in an area including fields for Session Deposits, Session Withdrawals, Session Games, and Close. Another field may be displayed upon selection of one or more of the aforenamed fields, for example a Session Games display area is shown in FIG. **41** and may include fields for a Session Number, Transaction Number, Transaction Date Time, Source (Game Play), Source ID, Source Details, Bucket, Value, Jurisdiction, and Status.

All game transactions for a specific player and selected session are shown on the above-referenced screen. Available field and features are listed in the below chart:

Field Name	Description
HID	The game play history number. This is a unique sequential number that is generated by the system.
GameName	The name of the Bally Live Reward game.
iViewId	A unique identification code of the iView device.
GmuId	The network identification code of the iView device.
Asset#	A unique identification code of the slot machine.
PLRCardNo	Player Card Number. This is a unique code to identify the player.
StartDateTime	The date and time when a particular Bally Live Reward game begins.
EndDateTime	The date and time when a particular Bally Live Reward game ends.
Source Details	The short description of the source.
Play Points Spent	Number of play points spent in playing a corresponding Bally Live Reward game.
Threshold Counter Spent	Number of threshold counter spent in playing a corresponding Bally Live Reward game.
Cash Won ($)	The amount won as cash (in dollars) by playing a corresponding Bally Live Reward game.
Bonus Points Won	The bonus points won by playing a Bally Live Reward game. These points are sent to Casino's CMS/CMP.
Game Play Details	
Game Name	Name of the Bally Live Rewards game.
StartDateTime	The date and time when a particular Bally Live Rewards game begins.
EndDateTime	The date and time when a particular Bally Live Rewards game ends.
Reward Level	Paytable name that was attained by the player for playing any particular game.
Score	This is the result of last played game which is a current pay level number from descending.
Pay Level	Pay level of particular Paytable won by the player.

Referring to FIG. **42**, a Prizes-Conversions panel **4200** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. A closeup view of the prizes-conversions panel **4202** is shown in FIG. **42**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Prizes-Conversions panel may include fields for Prize Type, Cashable, Dollar Value, Jurisdictional Include, Mapped Player Types, and Expire Day(s).

Live Rewards games are comprised of four types of payoffs/prizes. The below table depicts the features of these four types:

Features of Prize Types

Prize Type	Cashable	Dollar Rate per Prize type	Applicable to Jurisdiction limits	Mapped Player Types	Expire Day(s)
Cash	Yes	1 dollar	Yes	Gold Carded Silver Carded	Can be redeemed any time.

-continued

Features of Prize Types

Prize Type	Cashable	Dollar Rate per Prize type	Applicable to Jurisdiction limits	Mapped Player Types	Expire Day(s)
Bonus Points	Yes	0.50 dollars	Yes	Gold Carded Silver Carded	Can be redeemed any time. This can be cashable or non-cashable depending on the settings in the CMS application of the respective casino.

In one or more embodiments, winnings may be stored in the player's Live Rewards account. In one or more embodiments, cash winnings may be paid at the gaming machine, either directly from the game or at the player's request. On card insertion, the total value of Play Points, uncollected Bonus Points and cash including jackpots that require hand pay, and Live Rewards Game Start Threshold counters in the player's main account are transferred into a player session account on the LRS.

On player card removal, the player's session account is closed and any Play Points, Threshold Counters, Cash, and Bonus Points are added back into the player's main account. These are usable the next time the player inserts the card.

Multiple session accounts may be opened at any given time. Each session is reserved for itself whatever Play Points etc. that are not currently reserved by another open session.

Winnings from a Live Rewards game are immediately transferred to the player's session account at the end of the game.

Players may enter their Player's Club card PIN (Personal Identification Number) to collect cash winnings.

Player cash winnings are transferred to the slot machine using an electronic funds transfer or through a hand pay. All electronic funds transactions from the Live Rewards game to the base game are logged in the slot management system and on the LRS.

Bonus points won by a player are transferred to the player's account on the casino management system.

All the bonus point transactions are logged by the casino management system and LRS.

To View Prize Conversion Chart

Purpose: To view a chart on various type of prizes to be dispersed to players based on the features of the prizes (See "Features of Prize Types" on page 10). Two Administrator (Admin) users may be logged in to view the prize conversion chart.

Procedure: Follow these steps to view the prize conversion chart.

STEP 1. From the Live Rewards Management menu, go to Games Management submenu and select Prizes-Conversions.

STEP 2. System displays the chart on prize conversion as shown below.

Reports

Referring generally to FIG. **43** through **55**, various reports may be generated using the Live Rewards management application. The Live Rewards management application helps you track revenues and the types of transactions happening on the iVIEW devices that are useful for accounting, auditing, and marketing purposes. These reports contain details of transactions of all game play and cashout data for each iVIEW. Data is sent to the LRS on Card-in/Card-out, before and after a system game, when an electronic funds transfer is sent to the

base game, or a hand pay occurs. Any data that was unable to be sent due to network or other issues is sent at initial power-up. You can view the reports on-screen or save it as a PDF document, excel spreadsheet, word document, or tab delineated text file. It is helpful when the casino needs to import any transactions details into their database. Any regular user can access Reports submenu from the Live Rewards Management menu.

Gameplay Details Report

Purpose: To generate report on game-wise transaction details. You can filter the report based on time frame, player card number, identification code of Asset and iVIEW devices, and game type.

This report lists identification code of Game play history, iVIEW device and slot machine, game name, network address of the device, player card number, date and time, of the begin and end transaction, number of play points and threshold counter played out, winnings on cash and bonus points.

Field Description

This section lists the different filters and their descriptions for the Gameplay Details report.

Report Column Description

This section lists the column headers and their description for the Gameplay Details report.

Procedure: Follow these steps to generate Gameplay Details report.

STEP 1. From the Live Rewards Management menu, go to Reports submenu and select Gameplay Details.

STEP 2. By default, system selects date and time as per settings in Report Configuration screen. However, you can select required date (in Dates Between fields) and time period (in Time fields).

STEP 3. Optionally, you can:

A. Type any/all of the following:

iVIEW Id

PLR Card#

Asset#

Select Game from the drop-down list.

STEP 4. Once you have made all your selections, click Show to view the transaction report.

STEP 5. Select Export Format from the drop-down list to save the generated report into your desired output.

STEP 6. Next, click Save/Open. System prompts with you as "Do you want to open or save this file?".

A. Click Open to view the report through your selected medium.

B. Click Save. Specify required location to save the output in your selected medium.

C. Click Cancel to this task.

Referring to FIG. **43**, a Report Configuration panel **4300** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. A closeup view of the report configuration panel **4302** is shown in FIG. **43**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Report Configuration panel may include fields for the Casino Name, Casino Address, Reports Default Time, and Save Settings.

Report Configurations

Purpose: To customize the parameters for generating reports. By default, the report gets generated every 24 hours.

Procedure: Follow these steps to set up default values for the reports.

STEP 1. Type name of the casino in Casino Name field (May be mandatory). The maximum length is 20 characters (including spaces and special characters).

STEP 2. Type street address of the casino in Casino Address1 field (May be mandatory). The maximum length is 50 characters (including spaces and special characters).

STEP 3. Type state and country of the casino in Casino Address2 field. The maximum length is 50 characters (including spaces and special characters).

STEP 4. Type contact details of the casino in Casino Address3 field. The maximum length is 50 characters (including spaces and special characters).

STEP 5. Select hour, minutes, seconds in Reports Default Time field. This is for setting up the time period while generating reports. The report generates for 24 hours. For example: If Time is set as 14:00:00, then the report may be generated from 14:00:00 (previous date) to 14:00:00 (current date).

STEP 6. Click Save Settings. System saves the settings and confirms the same by displaying the message as shown below.

Referring to FIG. **44**, a Notification Messages panel **4400** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. A closeup view of the notification messages panel **4402** is shown in FIG. **44**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Notification Messages panel may include fields for Dates Between, iView or Live Rewards Server Notifications, Show, Select Export Format, Save/Open, and Request Summary. The Request Summary may include fields for Event Type, Event Date Time, iViewID, Asset Number, Error Code, Event Info.

All iVIEW events and Live Rewards server events are logged on one of the network servers and may be recalled for display on the Notification Messages panel. This feature is used to help casino personnel view error or other events for maintenance and customer service reasons.

Field Name	Description
Event Info	The short description of the issue observed by the iView device.
Live Rewards Server Notifications	
DateTime	The date and time when the LRS encounters any run time error.
Application Name	The name of the application.
Module Name	The name of the module.
Message Type	The type of the message written by the Live Rewards management application.
Message Description	The short description of the message.

Notification Messages Report

Purpose: To generate a report that displays the errors/debug observations posted by the iVIEW devices to the Live Rewards management application. This report also displays the internal logs written by the LRS. For example, tilt messages on the iVIEW.

Field Description

This section lists the different filters and their descriptions for the Notification Messages report.

Report Column Description

This section lists the column headers and their description for the Notification Messages report.

Procedure: Follow these steps to generate Notification Messages report.

STEP 1. From the Live Rewards Management menu, go to Reports submenu and select Notification Messages.

STEP 2. By default, system selects date and time as per the defaults set in Report Configuration screen. However, you can select required date (in Dates Between fields) and time period (in Time fields).

STEP 3. Select iVIEW Notifications or Live Rewards Server Notifications radio button.

STEP 4. Click Show to view the report based on your selection.

STEP 5. Select Export Format from the drop-down list to save the generated results into your desired output.

STEP 6. Next, click Save/Open. System prompts: Do you want to open or save this file?

A. Click Open to view the report through your selected medium.

B. Click Save. Specify the required location to save the output in your selected medium.

C. Click Cancel to this task.

Referring generally to FIG. **45-49**, settings changes may be logged and recalled by an operator at a control console panel **4500**.

Settings Change History Report

Purpose: To generate report that lists the history of changes made to the following components:

Global Settings
Live Rewards Start Rules
Games
Pay Table Sets
Banned Players
User Profile Changes, and
Users Logon Session details.

This report displays the date and time when these changes happened, primary and secondary users' IDs who are responsible for these changes and comments/reasons for the changes. This report can be used for auditing purpose.

Field Description

This section lists the different filters and their descriptions for the Settings Change

History report.

Procedure: Follow these steps to generate Settings Change History report.

STEP 1. From the Live Rewards Management menu, go to Reports submenu and select Settings Change History.

STEP 2. By default, system selects date and time as per the defaults set in Report Configuration screen. However, you can select required date (in Dates Between fields) and time period (in Time fields).

STEP 3. Select any one of the following radio button:

Global Settings
Live Rewards Start Rules
Games
Pay Table Sets
Banned Players
User Changes
Users Session

STEP 4. Click Show to view the report based on your selection.

STEP 5. Select Export Format from the drop-down list to save the generated results into your desired output.

STEP 6. Next, click Save/Open. System prompts with you as Do you want to open or save this file?.

A. Click Open to view the report through your selected medium.

B. Click Save. Specify the required location to save the output in your selected medium.

C. Click Cancel to this task.

Referring to FIG. **50**, a Patron Account Activity Summary/Details panel **5000** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. A closeup view of the patron account activity panel **5002** is shown in FIG. **50**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Patron Account Activity Summary/Details panel may include fields for Dates Between, Summary, Details, Player Card Number, Show, Select Export Format (such as PDF), Save/Open, and Activity Summary/Detail.

Patron Summary/Details Report

Purpose: To generate a summary of player card number-wise transaction report. In addition, you can also generate detailed player-wise transaction report. You can filter the report based on time frame and Player Card number. The summary report in accordance with player card number lists Player card number, player name, total number of the games played, total number of games won, total number of play points accumulated and spent, total number of threshold counter accumulated and spent, total number of bonus points gained and deposited to player's account, and total amount won and got credited to the respective player's main account. The detailed report lists player card number, player name, date and time of the transaction, details about source of the Live Reward game, reward type and transaction details.

Field Description

This section lists the different filters and their descriptions for the Patron Summary/Details report.

Report Column Description

This section lists the column headers and their description for the Patron Summary/Details report.

Procedure: Follow these steps to generate Patron Account Activity Summary/Details report.

STEP 1. From the Live Rewards Management menu, go to Reports submenu and select Patron Summary/Details.

STEP 2. By default, system selects date and time as per settings in Report Configuration screen. However, you can select required date (in Dates Between fields) and time period (in Time fields).

STEP 3. Select Summary radio button to list summary of transactions in accordance to the player cards, or, Select Details radio button to list player-wise transactions.

STEP 4. Optionally, type PLR Card# to list transactions for a particular player card number.

STEP 5. Click Show to view the report based on your selection.

STEP 6. Select Export Format from the drop-down list to save the generated results into your desired output.

STEP 7. Next, click Save/Open. System prompts with you as "Do you want to open or save this file?".

A. Click Open to view the report through your selected medium.

B. Click Save. Specify required location to save the output in your selected medium.

C. Click Cancel to this task.

The charts below shows the fields and descriptions available on this Rewards Server Patron Summary/Details report:

Field Name	Description
	Summary Report
PLRCarNo	Player Card Number. This is a unique code to identify the player.
PLRName	The name of the player.
TotalGamesPlayed	The total number of games played in accordance to the player card.
TotalGamesWon	The total number of games won that account to the player card.
TotalPlayPointsIn	The total number of play points accumulated in accordance to the player card.
TotalPlayPointsOut	The total number of play points played out in accordance to the player card.
TotalThresholdCounterIn	The total number of threshold counter accumulated in accordance to the player card.
TotalThresholdCounterOUt	The total number of threshold counter depleted in accordance to the player card.
TotalBonusPointsIn	The total number of bonus points won in accordance to the player card.
TotalBonusPointsOut	The total number of bonus points that got credited to the respective player's main account successfully.
TotalCashIn($)	The total amount won in accordance to the player card.
TotalCashOut($)	The total winning amount that got credited to the respective player's main account successfully.
	Detailed Report
TranDateTime	Date and Time of the transaction when it was created.
Source	Source of the transaction. The possible values are: ALL Session Bucket iView Game Play Partial Withdrawal Hand Pay Live Rewards Server
SourceId	A unique identification code of the source.
SourceDetails	A short description of the source.
PrizeType	The type of the reward subject to the transaction. The possible values are: All Cash Bonus Points Play Points Threshold Counter
TranType	Type of the transaction. The possible values are Credit and Debit.
TranValue	Amount of the transaction.
Jurisdiction	Jurisdiction position of the transaction. Possible values are YES and NO.
Status	Status of the Transaction. Possible values are: Committed Open Rollback

Referring to FIG. **51**, an iView (player interface unit) Summary panel **5100** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. A closeup view of the iView summary panel **5102** is shown in FIG. **51**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The iView Summary panel may include fields for Dates Between, iView ID, Asset Number, Show, Select Export Format (such as PDF), Save/Open, and iView Summary.

Device specific reports (independent of player) may be recalled from the network database and displayed on this panel. Each of the fields displayed in the iView Summary may be described as:

Field Name	Description
iViewId	A unique identification code of the iView device.
CasinoId	A unique identification code of the casino.
GmuId	The network identification code of the iView device.
AssetId	A unique identification code of the slot machine.
TotalGamesPlayed	The total number of games played on a particular iView device.
TotalGamesWon	The total number of games won on a particulart iView device.
TotalPlayPointsAccrued	The total number of play points accumulated on a particular iView.
TotalPlayPointsSpent	The total number of play points played out on a particular iView.
TotalCashWon($)	The total amount won in a particular iView device.
TotalBonusPointsWon	The total number of bonus points won on a particular iView device.
TotalCashWithdrawals($)	The total winning amount that got credited to the respective player's main account successfully.

iVIEW Summary Report

Purpose: To generate report on summary of transactions for a particular iVIEW. You can filter the report based on time frame, identification code of iVIEW and/or slot machine.

The report lists identification code of iVIEW, Casino and Slot machine, network address of the iVIEW device, total number of the games played, total number of games won, total number of play points accumulated and spent, total amount won (in dollars), total number of bonus points gained and total amount transferred successfully to the respective player's account.

Field Description

This section lists the various filters and their descriptions for the iVIEW Summary report.

Report Column Description

This section lists the column headers and their description for the iVIEW Summary report.

Procedure: Follow these steps to generate iVIEW Summary report.

STEP 1. From the Live Rewards Management menu, go to Reports submenu and select iVIEW Summary.

STEP 2. By default, system selects date and time as per settings in Report Configuration screen. However, you can select required date (in Dates Between fields) and time period (in Time fields).

STEP 3. Optionally, you can:

A. Type iVIEW ID to view summary of a particular iVIEW device.

B. Type Asset# to view summary of the iVIEW device on a particular slot machine.

STEP 4. Click Show to view the report based on your selection.

STEP 5. Select Export Format from the drop-down list to save the generated results into your desired output.

STEP 6. Next, click Save/Open. System prompts: Do you want to open or save this file?

A. Click Open to view the report through your selected medium.

B. Click Save to save the generated report in your selected medium. System opens Save As dialog box. Specify required location.

C. Click Cancel to this task.

Referring to FIG. **52**, a Liability Report panel **5200** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. A closeup view of the liability report panel **5202** is shown in FIG. **52**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Liability Report panel may include fields for Date and Time, Show, Select Export Format, Save/Option, Prize Type, Opening Balance, Total In, Total Out, Expire Quantity, and Closing Balance.

Liability Report

Purpose: The Liability report displays the outstanding cash and play points, un-transferred bonus points and threshold counter values for a particular day, for the entire casino. It can also be generated as a patron liability report.

Field Description

This section lists the different filters and their descriptions for the Liability report.

Procedure: Follow these steps to generate Liability report.

STEP 1. From the Live Rewards Management menu, go to Reports submenu and select Liability Summary.

STEP 2. By default, system selects date as system date and time as per settings in Report Configuration screen. However, you can select required date (in On field) and time period (in Time fields).

STEP 3. Select Total Liability or Patron-wise Liability option. By default, system selects Total Liability option.

STEP 4. Click Show to view the report. System deploys the total outstanding cash and play points, un-transferred bonus points and fresh threshold counter values for the selected day.

STEP 5. Select Export Format from the drop-down list to save the generated results into your desired output.

STEP 6. Next, click Save/Open. System prompts with you as "Do you want to open or save this file?"

A. Click Open to view the report through your selected medium.

B. Click Save. Specify the required location to save the output in your selected medium.

C. Click Cancel to this task.

Referring to FIG. **53**, a Patron Account Activity Summary/Details panel **5300** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. A closeup view of the patron account activity panel **5302** is shown in FIG. **53**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Patron Account Activity Summary/Details panel may include fields for Dates Between, Summary, Details, Player Card Number, Show, Select Export Format (such as PDF), Save/Open, and Activity Summary/Detail.

Patron Transaction Details

Purpose: To generate a transaction report for a particular player card number. You can filter the report based on time frame and prize type. The report in accordance with player card number lists player card number, transaction identifier, date and time of the transaction, details about source of the Live Reward game, reward type and transaction details.

Field Description

This section lists the different filters and their descriptions for the Patron Transaction Details report.

Procedure: Follow these steps to generate Patron Transaction Details report.

STEP 1. From the Live Rewards Management menu, go to Reports submenu and select Patron Transaction Details.

STEP 2. By default, system selects date and time as per settings in Report Configuration screen. However, you can select required date (in Dates Between fields) and time period (in Time fields).

STEP 3. Type Player Card# to list transactions for a particular player card number (May be a mandatory step).

STEP 4. Optionally, select Prize Type from the drop-down list.

STEP 5. Click Show to view the report based on your selection.

STEP 6. Select Export Format from the drop-down list to save the generated results into your desired output.

STEP 7. Next, click Save/Open. System prompts with: Do you want to open or save this file?

A. Click Open to view the report through your selected medium.

B. Click Save. Specify required location to save the output in your selected medium.

C. Click Cancel to this task.

Referring to FIG. **54**, a Patron Account Activity Summary/Details panel **5400** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. A closeup view of the patron account activity panel **5402** is shown in FIG. **54**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Patron Account Activity Summary/Details panel may include fields for Dates Between, Summary, Details, Player Card Number, Show, Select Export Format (such as PDF), Save/Open, and Activity Summary/Detail. In this figure, Summary has been selected and the associated information is displayed. The steps are as described in FIG. **53**, apart from this selection.

Referring to FIG. **55**, a Transaction Details panel **5500** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. A closeup view of the transaction details panel **5502** is shown in FIG. **55**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Transaction Details panel may include fields for Dates Between, Source, Player Card Number, Prize Type, Transaction Type, Show, Select Export Format (such as PDF), Save/Open, and Transaction Detail report.

The transaction ID, data/time, which player card, source of transaction, source ID, prize type, transaction type (debit/credit), transaction value, jurisdictional event, and status may be shown in this panel.

Transaction Details Report

Purpose: To generate report for all types of transactions initiated by the iVIEW devices. You can filter the report based on time frame, source of transaction, Player Card Number, reward type, transaction type and source Id. This report lists the transactions with respect to all opened and closed sessions, begin and end game, play point and Threshold counter deposits, and player cash winning transactions initiated by an iVIEW device to the LRS.

Field Description

This section lists the different filters and their descriptions for the Transaction Details report.

Procedure: Follow these steps to generate Transaction Details report.

STEP 1. From the Live Rewards Management menu, go to Reports submenu and select Transaction Details.

STEP 2. By default, system selects date and time as per the defaults set in Report Configuration screen. However, you can select required date (in Dates Between fields) and time period (in Time fields).

STEP 3. Optionally, you can:

A. Select any/all of the following from the respective drop-down list:

Source

Prize Type

Transaction Type in Tran. Type field

B. Type Player Card number in Player Card # field.

C. Type Source Id, if you want to view the report of particular Source.

STEP 4. Once you have made all your selections, click Show to view the transaction report.

STEP 5. Select Export Format from the drop-down list to save the generated report into your desired output.

STEP 6. Next, click Save/Open. System prompts with you as "Do you want to open or save this file?".

A. Click Open to view the report through your selected medium.

B. Click Save to save the output in your selected medium. System opens Save As dialog box. Save the file in required location.

C. Click Cancel to this task.

Field Name	Description
Dates Between, Time . . .	Start date, time and end date, time. You can select date range (Month and day) and time range (Hours, Minutes, Seconds) from the drop-down list. The end date should be greater than the start date. Start Date, Time Dates Between September 02 10 00 00 < > < > < > < > < > End Date, Time And September 02 10 00 00 < > < > < > < > < >
Source	This is a drop-down list that displays a source of the transaction. The possible values are: ALL Displays transacations from all sources. Session Bucket Not currently used. iView Displays transactions from all iView devices. This can be credit of play points or Threshold Counters to the player's session accounts or a debit from the session account to the base game in the case of cash withdrawals. (Partial withdrawals are handled separately. Excludes partial withdrawals.) Game Play Displays transactions occurred in the course of all Live Reward game plays. This can be Begin Game/End Game. Partial Withdrawal Displays all transactions with respect to the Partial Withdrawal category. For example, you attempt to transfer $250 to the base game, but the base game's allowable transfer limit is $100, so only $100 is transferred. This constitutes a partial withdrawal. Hand Pay Displays all transactions with respect to Hand Pay category. For example, if your winnings are more than the jurisdictional limit, you cannot transfer the winnings to the base game. You need to initiate hand pay by pressing Collect on the iView interface, entering your PIN number, and pressing Service to inform the casino that you need assistance. Then, the casino employee gets the appropriate IRS tax forms for you to sign and pays you the cash award by hand. For this source ID is Employee Number and source is Hand Pay. Live Rewards Server (LRS) Displays transactions that are caused by LRS. This can be debit/credit of the cash/bonus points threshold counter/play points directly to the player's main account through the Live Rewards management application. For these transactions, the source would be LRS and the source ID would be logged in User ID (Primary User). For example, for promotional purpose, casino introduces and declares that, if anyone registers newly, they give 100 play points. So that they can play Bally Live Reward games. These play points are credited to newly registered player's account through Live Rewards management application. For this a new transaction is created and the source is LRS. By default, system selects ALL, to include all sources in the report.
Player Card #	Player Card Number. It is a unique code to identify the player. The player card number can be an alphanumeric value of 20 characters.
PrizeType	This is a drop-down list that displays reward types for the transaction. The possible values are: All Cash Bonus Points Play Points Threshold Counter By default, system selects ALL to include all types of rewards in the report.
TranType	Type of the transaction. The possible values are: Credit - The amount withdrawn from your account. Debit - The amount deposited to your account.
SourceId	A unique identification of the source.

Referring to FIG. **56**, a Create New User panel **5600** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. A closeup view of the create new user panel **5602** is shown in FIG. **56**A. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The Create New User panel may include fields for User Name, User ID, Password, Re-enter Password, Administrator or Player Management Only, and Create User.

Managing Users

User Authorization options help you to set up access rights for Live Rewards management application users. Upon granting access, each user type, ID and password is verified before the application is made available to them. The user type defines the tasks available to the user.

User Types and Privileges

There are two types of users: Regular and Administrator. The privileges of these user types are:

Regular

A regular user can view reports. Depending on how this user type is configured, the Regular user can ban players from playing Live Rewards, maintain player session details and debit/credit transactions from player account.

Administrator

An administrator is granted the same privileges as a regular user, plus the ability to create and maintain the following:

User Profiles

Global Settings

Start Rules for Live Rewards

Pay Table Sets

The administrator user can also debit or credit a player account, activate and register iVIEW devices, set up the defaults for generating report. For regulatory purposes, two Administrator users are often required to access User Authorization.

Regular user can access Reports submenu from the Live Rewards Management menu. Regular user can also access Player Management submenu from the Live Rewards Management menu, provided the player management role is enabled for that user.

For regulatory purposes, two Administrators are often required to access Games Management and User Authorization from the Live Rewards Management menu. This control is incorporated in the login procedure as shown with the login panel figure.

Creating a New User Account

Purpose: To create a new user account. Plus, the user can set the administrator and player management rights for the new account. Two Administrator (Admin) users may be logged in to create a new user account.

Procedure: Follow these steps to create a new user account.

STEP 1. From the Live Rewards Management menu, go to User Authorization submenu and select Create New User.

STEP 2. Type User Name (Mandatory). The maximum length is twenty characters (including spaces and special characters).

STEP 3. Type User Id (Mandatory). The maximum length is eight characters and may contain five alphanumeric characters. No special characters are allowed except under score ().

STEP 4. Type Password (May be mandatory). For example, the maximum length may be twenty characters and may contain at least six characters including spaces and special characters. Biometric identification may be used as an alternative or in addition to passwords.

STEP 5. Type password again in Re-enter Password field to confirm the password (May be mandatory).

STEP 6. Select Is Administrator check box to give admin rights to the new user.

STEP 7. Select Player Management check box to give rights to ban players from playing Live Rewards, maintain player session details and debit/credit transaction from the player account.

Password input may be case sensitive. When you type passwords, you may only see ••••• (bullets). System displays an error message "Mismatch Passwords", if there is a mismatch in the passwords entered by you in Password and Re-enter Password fields.

If Player Management check box is selected, user can access the following screens under Player Management submenu from the Live Rewards Management menu:

Clear PIN Lockout

Banned Players

Player Session Details

Active Player Sessions

Debit/Credit Player Account.

STEP 8. Click Create User. System verifies the User Id for duplication. If it is not duplicated, system creates the new user and confirms the same by displaying the message as shown below.

Referring to FIG. **57**, a Live Reward flow graph **5700** with and without player card is shown such as may be used on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines.

FIG. **57** is provided as FIGS. **57-1**, **57-2** and **57-3**. Process (graph) **5700** is illustrated with an initial state of a player account at module **5702**. At module **5704**, the player account is reset as the session information of module **5706** is updated with the player account data for the first player account card insertion. Basically, the first player account card insertion allows for use of the player account. At module **5708**, the (empty) player account is available for a second session at module **5710**, resulting from insertion of a second player card tied to the player account. From here, the two sessions occur in parallel.

At module **5712**, the first session is played, with the original player account information. At module **5714**, the player plays an EGM and wins, with accumulated winnings shown at module **5716**. Meanwhile, at module **5718**, the second session occurs, with winnings for the second session shown at module **5720**. Additionally, as shown, the player cashes out at module **5722**, and the session is updated at module **5724**. At module **5726**, the second session terminates with the player pulling the card, and data is rolled to the master account at module **5728**. Likewise, at module **5730**, the first session terminates and data is rolled to the master account at module **5732**.

Referring to FIG. **58**, a Live Rewards Session Accounts panel **5800** is shown such as may be used on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The panel **5800** provides information about session accounts.

Referring to FIG. **59**, a panel **5900** is shown such as may be displayed on an Operator Control Console, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines. The panel **5900** provides data from the process of updating an account.

Referring to FIG. **60-61**, a Live Rewards Gaming Network is illustrated, which may include an Operator Control Con-

sole, such as a Bally Control Panel and/or a Bally Live Rewards Server Management Console, connected to a server network, such as a Bally SMS & CMS. The operator control console may comprise a conventional personal computer with coding implemented to execute various processes associated with the network servers and gaming machines.

In one embodiment, the following equipment is specified.

iView Equipment

In one embodiment, iVIEW is an LCD touch-screen display that replaces the 2-line, 2×20 display and keypad that are currently separate devices on the standard Enhanced Player Interface (EPI). iVIEW can upgrade any current EPI device, and supports all existing GMU functionality.

Live Rewards Server

The LRS communicates with iVIEW through Web Services over http/http(s).

Hardware

P/N: BS-90-0031

1 ea. external HP ProLiant DL 140G2 Rack 1U 1X Xeon 2.8/1M

1 ea. USB Floppy Disk Drive

2 ea. HP 36 GB 15K Ultra320 NHP Hard Drive

DVD Option Kit DL145

ML110 SCSI RAID CTR WW (Adaptec 2120S).

Software

Microsoft Windows Server 2003 Standard Edition

Microsoft Windows SQL Server 2000 with Service Pack 3

Microsoft Internet Information Server 6.0 (IIS)

Microsoft .NET Framework 2.0

Crystal Reports—Redistribution Package

iSeries Access for Windows (Service Pack 6082 and higher)

Gamenet.exe.1050 (Live Rewards are supported only with the Windows Gamenet)

iVIEW.bin.960

SMS_NT.HEX.10800

Gns.exe.2010 (Live Rewards are supported only with the Windows Gamenet Server).

Referring to FIG. **60**, the system **6000** is shown with a client side device **6010** and a server side device **6050**. Client device **6010** includes an Audio amplifier **6015**, speakers **6020**, iView processor **6025**, card reader **6030**, communications processor **6035** and EGM **6040**. Server side devices **6050** includes an Ethernet switch **6055**, Ethernet connections **6060**, a live rewards server **6065**, CMP **6085**, SDS server **6080**, gamenet bridge **6075**, and slot line connector **6070** with optional intermediate board (harmonica board) if necessary to coordinate signals from multiple client devices **6010**. Communications processor **6035** communicates via slot line **6070** with the gamenet bridge **6075**, providing results from EGM **6040**. iView processor **6025** communicates with the live rewards server **6065** via Ethernet connections **6060** to provide interactive player-specific information from the rewards system.

Referring to the illustration in FIG. **61**, a gaming system **6100** is provided. The gaming system includes a client machine **6110**, gamenet bridge **6135**, SDS server **6160**, CMS/CMP server **6150**, rewards server **6140** and game to server communications link **6145**. The client machine **6110** houses a game, with an iView module (rewards module) **6115**, communications module **6120**, game unit (base game **6125**) and credit meter **6130**. Also represented is a card slot. Communications module **6120** communicates using a slot line with gamenet bridge **6135**, providing basic game information, such as wins, losses, credit information, etc. Likewise, rewards module **6115** communicates via game to server link **6145** with rewards server **6140**, providing information about rewards status to the server, and conveying messages from the server to the player.

Referring to FIG. **62**

FIG. **62** depicts a software flowchart **6200** showing how the Live Rewards bonus game frequency of play is controlled. The server side variables are configured as shown in FIG. **32**. Events (**6205**, **6210**, **6215**, **6220**, **6225**) contribute to a threshold counter **6230**. The threshold counter **6230** and the cost of the game are used to control the frequency of a player being able to play a live rewards game. Even if the player has enough play points to play the game may not be enabled to play unless the business rules on this figure are achieved.

The base game played **6280** provides play points to a total unused play points **6280**. If the total unused play points are not enough to achieve a payment at module **6275**, a determination of the percentage for starting the next game is made at module **6265**. If the determination at module **6275** is that enough unused play points are present, then a determination of the percentage for starting the next game is made at module **6260**. At module **6250**, the threshold counter divided by the system game start threshold from module **6240** and the percentages from modules **6260** and/or **6265** are evaluated, and the percentage necessary for completion is displayed at module **6270**.

Below is the software logic routine used by the iVIEW to calculate the ability for the player to play a bonus game and how close they are to playing so each game can tease the player into playing more on their primary game because the player sees progress to earning a bonus game. In the video poker game this shows 3 of the 5 cards are dealt to the player if the player is three-fifths the way to earning the bonus game.

There is a software function running in the iVIEW called BalanceUpdateData( ) or BUD that determines whether or not a player has earned enough playpoints and StartThresholdCounter points to start a Bonus game on iVIEW. This software can also run at the server in alternate embodiments. It also returns the percentage toward the next reward level the player is so that it may be shown in the console or game. The key variable set is the NextGamePercent variable that is used to determine the progress of the lights around the game button in the console browser or how close the player is to earning their bonus game inside a game. If the variable is 50 then 50% of the playfield in Poker would be shown (for example 50% of the cards would be visible). Meaning the player is 50% the way to their earning the Poker game.

These start threshold rules are configured in the Live Rewards Game Start rules configuration screen on the Live Rewards Server (refer to FIG. **32**). Referring to FIG. **36** the Threshold number is the number of play points required to fund this specific paytable for this specific game. The player specific buckets that accrue as the player plays are called PlayPoints and TC's (or threshold counter points) are used in the BUD calculations with the Play Points required for the selected game and the Game Start rules configured as configured in FIG. **32**).

The play points accrued determine the reward level of the game that will be played if the player chooses to play at this time. The reward level determines the games pay table. The more Play Points the player has the greater the reward level and better the pay table is for the player. A heavy wagerer will likely have a larger reward level and get better live rewards pay tables. A light wagerer will have smaller reward level bonus games but they will still be able to play if they met the start threshold conditions of BUD.

Referring to FIGS. **63-76**, the figures illustrate an embodiment of the invention as developed for the ACSC iSERIES platform.

Referring specifically to FIG. **63**, FIG. **63** is illustrated as FIGS. **63-1** and **63-2**. Process **6300** provides a process for maintaining rewards data. Process **6300** initiates at module **6355**. At module **6360**, the NT starts up. At module **6365**, it is determined whether the rewards feature is enabled. If the feature is turned off, at module **6370**, points required to play the game are deducted. After the patron removes their card (completes the game), then at module **6375**, information about the game is retrieved from the game machine and the rewards account for the player is adjusted.

If the rewards feature is turned on, at module **6305**, a patron inserts a card into a game machine. At module **6315**, the game machine receives information on the player rewards account, including information from module **6310** on criteria involved in playing the game. Data for the player may be maintained at module **6320**, for example. At module **6325**, the NT stores the updated patron data. At module **6335**, the patron determines (and provides to the system) whether to continue using the rewards system or not. If not, and the player pulls the card, then at module **6340**, data from the session is sent to the NT and at module **6345**, the session terminates. Note that in the example illustrated, module **6330** indicates the player played and earned 4 points.

If the player keeps playing with the rewards system by playing a system game, then at module **6350**, the player selects the system game (e.g. poker, bingo, etc.) If the player pulls their card at this point, the session information is transmitted at module **6380** and the session terminates at module **6382**. If the player continues to play the system game, then at module **6385** the points for the game are deducted, and at module **6390** the result is transmitted to the rewards system. Additionally, the result is displayed graphically for the user at module **6395** and the process terminates at module **6397**.

Various processes, as illustrated in FIGS. **64-67**, come into play in using the rewards system. Process **6400** of FIG. **64** illustrates a process of handling a system game with a player card in the device. At module **6410**, the machine receives the player card. At module **6420**, the machine and rewards system interact. At module **6430**, it is determined if rewards tracking is active. If not, the system returns (provides) the point balance to the machine at module **6440** and transfers the points to the machine at module **6450**.

If the tracking system is active, at module **6460**, the points request goes through the tracking system and at module **6465** the system sends the points to the machine. Additionally, at module **6470**, the system is checked for a player balance at database **6480**. The balance is returned to the system at module **6490**, and this point balance will be the point balance provided at module **6465**.

With points earned, process **6500** of FIG. **65** executes. At module **6510**, points are earned at the machine. At module **6520**, it is determined whether tracking of rewards is active. If not, then at module **6530**, the system is notified of the points earned (for potential later tracking). If so, then at module **6540**, the system points and any residual is send to the system. At module **6550**, the system updates player balances in the system database **6560**.

In general, the results of playing a game are illustrated in process **6600** of FIG. **66**. With a system game played at module **6610**, the process determines if the tracking system is active at module **6620**. If not, the system is notified of the result at module **6630**. If the tracking system is active, at module **6640** the results and player details are sent to the system. At module **6650**, a determination is made as to whether cash or points are desired. (This may be a result of a user input, for example.) If cash, at module **6660** the cash notify system is provided the relevant information at database **6670**. If points, at module **6680** the points are added to the player account of database **6690**.

If withdrawal occurs, the process **6700** of FIG. **67** executes. At module **6710**, the request for a withdrawal is received. At module **6720**, the machine interacts with the tracking system and at module **6730**, a determination is made as to whether the tracking system is operating. If no, at module **6735**, a check is made as to whether the balance is ok (such as through an authorization request) and at module **6740**, any credits which are authorized are added at the machine. If the tracking system is operating/connected, then at module **6750** a request for the withdrawal is sent to the tracking system. The system verifies whether the balance is available at module **6760** using the player balances database **6770**, and returns to the machine whether the amount is available or not at module **6780**. This response is then returned to the machine through the system interface at module **6755** (and thus the balance is added is possible). The following further illustrates how this functionality and these processes may be realized in some embodiments.

In one embodiment, this system provides the ability for patrons to earn System Game Play Points by playing the base game. Once the patron has earned enough System Game Play Points they may be able to play a System Game on iVIEW. The specifics of this system are discussed in the following paragraphs. The patron can select whichever System Game they wish (Poker, Bingo, etc.). Once the System Game is selected, the patron may Spend their System Game Play Points to play the System Game. The system is configurable for (Cash to points) and (points for System Game play). This System Game is just like playing the base game, only on iVIEW.

After a System Game is played, if the result of the System Game is loss, then the NT may send up a **229** transaction with Result field 0. After a System Game is played, if the result of the System Game is less than the Hand pay limit, one of two things can happen. If the System Game Win Deposit is set to I (iSERIES), the system game result transaction with the amount won may be sent to the iSERIES. The iSERIES may then create a System Game Award record. The patron can then draw against the System Game Award record until the full amount is collected. Please note that multiple System Game Award records can be maintained per patron and the accumulative amount available to be collected may be sent down with each patron request. The applied amounts are deducted from the System Game Award records in the order of creation. The casino has the flexibly to make the winnings either cashable or non-cashable depending on Regulatory approval. A new withdraw transaction **225** may be generated when a System Game transfer occurs (the EI and PC meter may increment when the system set to transfer cashable credit), and (the PI meter may increment when the system set to transfer non-cashable credit). In the event that the transfer fails, a new System Game transfer void transaction **226** may occur and the money may be applied back to the patron's account. If the patron does not wish to download their winnings to the base game, they can select to have their winnings carried on their account. The casino can set how long the winnings are kept in the patrons account.

If the System Game Win Deposit is set to E(ePROMO), the system game result transaction with the points won may be sent to the Gamenet Server. The Gamenet Server may add the

points to the player's account. The patron can utilize the existing ePROMO feature in the system to withdraw money at the slot.

If the result of the System Game is greater than the Hand pay limit, then the NT may send up a **229** transaction with the Money Result field 1 (Hand pay), the Hand pay amount may be displayed on the System Game for 1 minute, then the system may return for more play.

The system can be set up to automatically transfer the winnings to the base game at the time of win. If the transfer is successful a **229** transaction is generated with Money Result field 2 (Game), if the transfer is unsuccessful a **229** transaction is generated with Money Result field 0 (iSERIES).

The system can be set up to always display the System Game to the patron and autoplay the System Game when the required System Game Play Points are earned. With this configuration, the patron may see his progress to playing the System Game as he is playing the base game. For example, if poker is the System Game, and it take 10 points to play the System Game. The patron may see the back of 2½ cards when they he earned 5 System Game Play Points. Once they earn another 5 points, the System Game may start automatically.

By example, System Game may be supported with the Windows Gamenet Browser and Server (hereby incorporated by reference).

iSERIES:

The iSERIES may now have to reconcile the games cashless meter. For example, if a patron withdraws $5.00 from their account onto the machine both the NT's and Game's EI meter steps for $5.00. If the result of a System Game transfer is $5.00 to the game, the NT's and Game's EI meter may both step for $5.00. The current reports that are used for ePROMO/eFUND/eBONUS may have to offset the System Game Transfer.

The iSERIES may have a System Game menu that the following options may be configured and sent to the NT in a new 232 transaction:

1) iSERIES version running supports System Game (0—Disable, 1—Enable)
   a) NOTE: This option can only be changed by the user after the license key and encryption key for number of assets is applied.
2) System Game active flag by card level—Turns on/off System Game for this patron by card level. (Bit **0**=Lowest, Bit **1**=Middle, Bit **2**=Highest, Bit **3**=No Card)
3) Auto play flag (0—patron select (Dashboard default screen, patron may press new System Game button on dashboard to play System Game)/1—auto play (System Game default screen, patron may select dashboard button on the System Game to go to dashboard)
4) Default System Game ID—36 digit GUID (Glo Unique ID)—Only applies to auto play mode
5) Hand pay limit—Minimum winning amount of $$ that may cause a hand pay. (0=No limit)
6) System Game Cashless Method for Carded Players—(0=Non-Cashable, 1=Cashable)
7) System Game Cashless Method for Non-Carded Players—(0=Non-Cashable, 1=Cashable)
8) Idle Time for abandon player reset—Only applies when System Game is enabled for non-carded play. (0=Never Terminate) NOTE: This parameter is represented in minutes
9) Pin Required for System Game winning's withdraw (0—Pin not required/1—Pin Required)
10) Cash Required to earn a System Game Play Point in cents
11) Minimum System Game Play Points to play a System Game
12) System Game Win Deposit (I=iSERIES (The winning may be transmitted to the iSERIES), G=Game (The winnings may be transmitted to the MPU), E=ePROMO (The winnings may be transmitted to the Gamenet Server to be added to the players ePROMO account)
13) Max Spend Multiplier (Max Bet for the System Game, the system game may multiply the Pay table with how many points are Spent)
14) Universal Card Supported (0=Not Supported, 1=Supported) NOTE: When Universal Card is supported, both System Game Play Points and residual may be maintained on the iSERIES. If Universal Card is not supported, both System Game Play Points and residual may be maintained on the Gamenet Server.
15) System Game Winning may be maintained on (0=iSERIES, 1=Gamenet Server)
16) Additional fields may be added for future support

These transactions may be sent down in the event of a change, and every echo test. The iSERIES may be able to force the 232 transaction down to the floor On Demand.

The iSERIES may send the following information to the Gamenet Server in the 200 glo transaction subcode "s":

1) iSERIES version running supports System Game (0-Disable, 1—Enable)
   a) NOTE: This option can only be changed by the user after the license key and encryption key for number of assets is applied.
2) Cash played to earn a System Game Play Point
3) System Game active flag by card level—Turns on/off System Game for this patron by card level. (Bit **0**=Lowest, Bit **1**=Middle, Bit **2**=Highest, Bit **3**=No Card)
4) Auto play flag (0—patron select (Dashboard default screen, patron may press new System Game button on dashboard to play System Game)/1—auto play (System Game default screen, patron may select dashboard button on the System Game to go to dashboard)
5) Default System Game ID—36 digit GUID (Glo Unique ID) Only applies to auto play mode
6) Hand pay limit—Minimum winning amount of $$ that may cause a hand pay. (0=No limit)
7) System Game Cashless Method for Carded Players—(0=Non-Cashable, 1=Cashable)
8) System Game Cashless Method for Non-Carded Players—(0=Non-Cashable, 1=Cashable)
9) Idle Time for abandon player reset—Only applies when System Game is enabled for non-carded play. (0=Never Terminate) NOTE: This parameter is represented in minutes
10) Pin Required for System Game winning's withdraw (0—Pin not required/1—Pin Required)
11) Purge by card level—Amount of time the System Game Play Points and Cash Residual is available to the player.
12) Minimum System Game Play Points to play a System Game in cents
13) System Game Win Deposit (I=iSERIES (The winning may be transmitted to the iSERIES), G=Game (The winnings may be transmitted to the MPU), E=ePROMO (The winnings may be transmitted to the Gamenet Server to be added to the players ePROMO account)
14) Max Spend Multiplier (Max Bet for the System Game, the system game may multiply the Pay table with how many points are Spent)
15) Universal Card Supported (0=Not Supported, I=Supported)
16) NOTE: When Universal Card is supported, both System Game Play Points and residual may be maintained on the

iSERIES. If Universal Card is not supported, both System Game Play Points and residual may be maintained on the Gamenet Server.

17) System Game Winning may be maintained on (0=iSERIES, 1=Gamenet Server)

18) Additional fields may be added for future support

This transaction may be sent down in the event of a change, and every echo test.

The iSERIES may have a configuration screen that may allow the operator control the following settings per System Game:

System Game name

System Game ID—36 digit GUID (Glo Unique ID)

IVIEW Show Number per System Game

Enable/disable by card level

Enable/disable by zone, denomination (cents)

System Game description

Once the configuration is complete, the iSERIES may convert the data into a SysGameConfig.xml file and then download the file to every gamenet. NOTE: The iSERIES may have the capability of sending down a 165 transaction subcode 8 to the Gamenet to send the SysGameConfig.xml immediately via non-interlaced/interlaced

0=Non-Interlaced

1=Interlaced

The iSERIES may have a liability report that may provide the total amount of System Game Winning's to the Total amount paid via Withdraw/Hand pay.

The iSERIES may have a liability report that may provide the total number of Points for each patron and a total summary.

The iSERIES may integrate all System Game data to the following: Slot Analysis, GDW, Group Analysis, Drop Breakdown, DOR, Applicable E-drop reports.

The iSERIES may have a screen that may show the operator the following:

1. Theoretical Cost (This may be a formula calculated based off of System Game Play Points and System Game Credit criteria.
2. Actual Cost for day

The iSERIES may turn off System Game when the operator threshold has been met. This threshold can be set by (day, week, etc.) If a threshold value is set by the user, the counters may started from that point. Once the threshold value is reached, an override option may be implemented allowing the operator to budget additional system game money. For example, if the threshold is $10,000.00 for one day, and the threshold is reached in 20 hours, the operator could set an override for an additional $5,000.00 dollars totaling $15,000.00 in 24 hours. The threshold can be set for automation or operator interaction. When set for operator interaction, once the threshold is reached, system game is shut down. When the System Game is shut down, the patrons may not be able to earn additional System Game Play Points, and/or play system games. The user may have to turn back on, the counter may be reset at that point.

The iSERIES may now enable a new bit in the 143 transaction that System Game is enabled for that asset. The iSERIES may be able to send the players points earned and residual to the Gamenet Server on a Re-build process in the event of a crash. The iSERIES may send down the following information to the NT in the 151 transaction:

1) System Game cash residual—cash left to be played before one System Game Play Point is earned. NOTE: The cash residual may only be downloaded to the first card in. The second card may receive a cash residual of % 100

2) System Game play points (accumulated)—Current amount of System Game Play Points earned but not yet Spent. NOTE: The System Game Play Points may only be downloaded to the first card in. The second card may receive a System Game Play Points of 0

GAMENET SERVER:

The GAMENET SERVER may send down the following new information to the NT in the 107 transaction:

1) System Game cash residual—cash already played before one System Game Play Point is earned. NOTE: The cash residual may only be downloaded to the first card in. The second card may receive a cash residual of 0

2) System Game play points (accumulated)—Current amount of System Game Play Points earned but not yet Spent. NOTE: The System Game Play Points may only be downloaded to the first card in. The second card may receive a System Game Play Points of 0

3) Game ID—36 digit GUID (Glo Unique ID)

4) Additional fields may be added for future support

The following transactions may be updated to include System Game Play Point Balance and Residual:

Transaction 003—PPS ACCOUNT STATUS INQUIRY

Transaction 053—CONFIRM OF AS/400 DEPST/WITHDR

Transaction 096—PPS BALANCE TRANSACTION

Transaction 198—PATRON THRESHOLD REACHED

NT to iVIEW:

Carded Players

When the System Game Flag is set for either (0—Card In, or 2—Both) and the Auto Play flag is set to 0—patron select:

a) The NT may instruct the iVIEW to display the System Game button.

b) As the patron plays the base game, the NT may calculate and update the iVIEW of current System Game Play Points earned.

c) Whenever the patron removes their card or abandon card occurs, the following additional fields may be included in the new System Game Play Point Transaction 228:

i) System Game cash residual—cash already played before one System Game Play Point is earned.

ii) System Game play points (accumulated during session)—Current amount of System Game Play Points earned but not yet Spent.

If the System Game button is pressed on iVIEW:

a) The iVIEW may send the button press to the NT.

b) The NT may instruct the iVIEW of all System Game parameters.

The following information is passed to the iVIEW when the patron presses the button:

1) Zone

2) Denomination

3) Card Level

4) Go to System Game Hub

5) System Game play points (accumulated)—Current amount of System Game Play Points earned but not yet Spent.

6) Minimum System Game Play Points to play a System Game

i) NOTE: If response from the NT is not received by the iVIEW.bin, the system selection screen may not be displayed.

b) The iVIEW.swf may display a System Game Selection Screen that may display the contents of the SysGameConfig.xml and Pay table.xml file for each active System Game that includes:

i) System Game type
ii) Pay table for each Card Level (No Card, Low Level, Middle Level, and High)
iii) System Game description
7) Once a System Game is selected
a) The iVIEW may run currently selected System Game.
i) Note that NT may continually send the iVIEW updated System Game Play Point calculations as the base game is played.
b) The System Game is playable when the minimum points to play is met.
c) When a System Game is played:
i) The iVIEW may report System Game play and results to NT.
8) Type of System Game—(Poker, Bingo, etc.)
9) Game ID—36 digit GUID (Glo Unique ID)
10) Result (Win/Loss)
11) System Game Play Points Spent
12) Win Amount (cash)
13) Hand Pay Flag (YIN)
14) System Game Cashable Flag
15) Random # Seed 1
16) Random # Seed 2
17) Random # Seed 3
18) Random # Seed 4
19) Pay Line that was hit (1-15)
i) The NT may update it's current parameters.
(1) If result is a win amount that exceeds Hand Pay Limit
(a) System Game Play transaction **229** is sent up the system.
(b) The System Game Play Transaction includes:
20) Type of System Game—(Poker, Bingo, etc.)
21) Result (Win/Loss)
22) System Game Play Points Spent
23) Win Amount (cash)
24) Money Result (1=Hand pay)
25) Reason Code (Not Used)
26) System Game Cashable Flag
27) Random # Seed 1
28) Random # Seed 2
29) Random # Seed 3
30) Random # Seed 4
31) Pay Line that was hit (1-15)
32) System Game ID—36 digit GUID (Glo Unique ID)
33) Patron Account (Note: if account=000000000 the iSERIES may not create eBONUS record)
34) Corp ID
35) Prop ID
36) Suffix
37) Card Type
38) Current NT meters
39) The Hand pay amount may display on the system game for 1 minute. After 1 minute the System Game may be enabled for game play.
40) System Game cash residual—cash already played before one System Game Play Point is earned.
41) System Game play points (accumulated during session)—Current amount of System Game Play Points earned but not yet Spent.
42) Points Won
43) NOTE: The System Game play points and System Game cash residual may be cleared to 0 after the **229** transaction is generated. The Balance may still be maintained on the NT.
(1) If the result is a win amount that does not exceed Hand Pay Limit and the System Game Win Deposit is set to A.
(a) System Game Play transaction **229** is sent up the system.
(b) The System Game Play Transaction includes:
44) Type of System Game—(Poker, Bingo, etc.)
45) Result (Win/Loss)
46) System Game Play Points Spent
47) Win Amount (cash)
48) Money Result (0=iSERIES, 4=ePROMO)
49) Reason Code (Not Used)
50) System Game Cashable Flag
51) Random # Seed 1
52) Random # Seed 2
53) Random # Seed 3
54) Random # Seed 4
55) Pay Line that was hit (1-15)
56) System Game ID—36 digit GUID (Glo Unique ID)
57) Patron Account (Note: if account=000000000 the iSERIES may not create eBONUS record)
58) Corp ID
59) Prop ID
60) Suffix
61) Card Type
62) Current NT meters
63) System Game cash residual—cash already played before one System Game Play Point is earned.
64) System Game play points (accumulated during session)—Current amount of System Game Play Points earned but not yet Spent.
65) Points Won
66) The System Game play points and System Game cash residual may be cleared to 0 after the **229** transaction is generated. The Balance may still be maintained on the NT. If the win is represented in Points, the NT may only send System Game winning points in the **229** transaction, the NT may only send ePROMO points earned on the card out transaction.
(a) The patron can select whether they wish to transfer their winnings to the base game or allow the winnings to be carried on their account.
(b) If the patron chooses to collect their winnings onto the slot. The patron may press the collect button on the System Game. The iVIEW may inform the NT of the Collect Button press. The NT may send a request to the iSERIES. The iSERIES may send down the balance. The patron may be prompted with their balance and a enter amount field. The patron can select in whole dollars, how much they would like to transfer. Once, the amount is selected an EFT may be performed, the result of the EFT may be treated the same way our EFT works today, only with different transactions.
(i) If the meter verifies the NT may send up a 226 transaction with subcode 000,
(ii) If the transfer was ok but the meter does not verify, the NT may send up a 230 System Game Withdraw Tilt transaction.
(iii) If the transfer was rejected by the MPU the NT may send up a 226-1 System Game Void transaction followed by a 227 System Game Transfer Not Available transaction. with a subcode representing why the MPU did not accept the transfer.
If the result is a win amount that does not exceed Hand Pay Limit and the System Game Win Deposit is set to G. The Winning may automatically be transferred to the base game at the time of win. If the transfer is successful a **229** transaction is generated with Money Result field 2 (Game), if the transfer is unsuccessful a **229** transaction is generated with Money Result field 0 (iSERIES)

At this point the patron can continue to play the base game and earn more System Game Play Points, continue to play

System Game if he/she still has System Game Play Points to Spend, or pull out his/her card.

When the System Game Flag is set for either (0—Card In, or 2—Both) and the Auto Play flag is set to 1—Auto Play:

At card in, the NT may instruct the iVIEW of all default System Game parameters. The following information is passed to the iVIEW:

1) Zone
2) Denomination
3) Card Level
4) Go to Default System Game
5) System Game play points (accumulated)—Current amount of System Game Play Points earned but not yet Spent.
6) Minimum System Game Play Points to play a System Game

As the patron plays the base game, the NT may calculate and update the iVIEW of current System Game Play Points earned. The System Game may display the percentage of System Game Play Points earned. For example, if poker is the System Game, and it take 10 points to play the System Game. The patron may see the back of 2½ cards when they he earned 5 System Game Play Points. Once they earn another 5 points, the System Game may start automatically.

Whenever the patron either removes their card or abandon card occurs, the 228 transaction may contain the following additional fields:

i) System Game cash residual—cash already played before one System Game Play Point is earned.

ii) System Game play points (accumulated during session)—Current amount of System Game Play Points earned but not yet Spent.

b) The process from this point is the same as Patron Select above.

NT to iVIEW:

Non-Carded Players

When the System Game Flag is set (1—No Card In, 2—Both), Auto Play may only work in this mode.

As soon as the handle meter steps, the NT may instruct the iVIEW of all default System Game parameters. The following information is passed to the iVIEW when the patron presses the button:

1) Zone
2) Denomination
3) Card Level (This parameter may not be used)
4) Go to Default System Game
5) System Game play points (accumulated)—Current amount of System Game Play Points earned but not yet Spent.
6) Minimum System Game Play Points to play a System Game

As the patron plays the base game, the NT may calculate and update the iVIEW of current System Game Play Points earned. The System Game may display the percentage of System Game Play Points earned. For example, if poker is the System Game, and it take 10 points to play the System Game. The patron may see the back of 2½ cards when they he earned 5 System Game Play Points. Once they earn another 5 points, the System Game may start automatically. If the player does not play the Base Game for the length of time the iSERIES has set, the System Game may be terminated immediately. The system game may not be interrupted by idle messages sent from iSERIES.

New iVIEW Files:

Two sets of files that get downloaded with the normal download procedure.

a) System Game SWF's may use SWF IVIEW ShowNumber's 300-321.

b) SysGameConfig.xml may be assigned IVIEW Show Number 119.

i) May use an XSD to ensure .xml file is valid before loaded to floor

ii) May include:

(1) System Game name
(2) System Game ID—36 digit GUID (Glo Unique ID)
(3) IVIEW Show Number per System Game
(4) Enable/disable by card level
(5) Enable/disable by zone, denomination
(6) System Game description

c) Pay table.xml

i) May be assigned IVIEW Show Number 120

ii) May use an XSD to ensure .xml file is valid before loaded to floor

iii) May include:

(1) System Game name
(2) System Game ID—36 digit GUID (Glo Unique ID)
(3) Pay table per System Game for both Cash and Points for each Card Level (No Card, Low, Middle, and High)

Pay table.xml may be handle and signed by. It may be downloaded via SMS Download Utility and may only be downloaded to the Gamenet as long as the MD5 file is validated.

iVIEW details:

1) The iVIEW may log the results of the last 50 System Games played.
2) The iVIEW may have battery backed up Ram for buffering information for when communication between the NT is down.
3) The iVIEW may have a button on the dashboard or in eCASH for Collect System Game Winnings. This way the patron can withdraw their winnings to the slot when System Game is disabled.

Example System Game Play Result

Type of System Game—30 bytes ASCII
Result—1 byte binary
0=Loss
1=Win
System Game Play Points Spent—4 bytes binary
Win Amount (cents)—8 bytes binary
Money Result—1 byte binary
0=iSERIES
1=Hand pay
2=Game
3=Tilt—
4=ePROMO
5=Loss
Reason Code—1 byte binary
6=Unconfirm
7=Reset
System Game Cashable Flag—1 byte binary
Random # Seed 1-2 bytes binary
Random # Seed 2-2 bytes binary
Random # Seed 3-2 bytes binary
Random # Seed 4-2 bytes binary
Pay Line—1 byte binary
System Game ID—36 digit GUID (Glo Unique ID)—36 bytes ASCII
Coin In—2 bytes
Coin Out—2 bytes
Hand pay—2 bytes

Handle Pulls—2 bytes
Coin Drop—2 bytes
Lucky Star—2 bytes
Coin Paid—2 bytes
Hand Paid—2 bytes
$1 Bills—2 bytes
$5 Bills—2 bytes
$10 Bills—2 bytes
$20 Bills—2 bytes
$50 Bills—2 bytes
$100 Bills—2 bytes
Promo In—2 bytes
Val Drop Door—2 bytes
Val Drop Box—2 bytes
EFT In—2 bytes
EFT Out—2 bytes
Promo Cash—2 bytes
Redeem Count MSB—2 bytes
Print Count MSB—2 bytes
Spare1—2 bytes
Spare2—2 bytes
Sequence Number—2 bytes
Patron Account—9 bytes (ASCII)
Corp Id—1 byte (ASCII)
Prop Id—1 byte (ASCII)
Card Type—2 bytes (ASCII)
Suffix—2 byte (ASCII)
System Game Cash Redidual—4 bytes binary
System Game Play Points Earned—4 bytes binary
Points Won—8 bytes binary

Example SMS Transactions from NT to Gamenet:

Request for System Game Balance
Withdraw System Game Winnings
System Game Withdraw Confirmed
System Game Withdraw Void
System Game Withdraw Not Available
System Game Play Points Earned Transaction
System Game Play Result Transaction
System Game Withdraw Failed
No Confirm with MPU
Reset during applying credits

Example SMS Transactions from System to NT:

Set Coin Residual
Set Validator Parameters
Download SMS Patron Promo/Service Key Options
Send iVIEW Files immediate
System Game Balance Available
System Game Sufficient/Insufficient Funds
System Game NT Configuration
Gamenet Server System Game Configuration

Referring to FIG. **68**,

Bally Technologies encrypted number of assets generation is illustrated with panel **6800**:

Bally Technologies support personal, verifies that the customer requesting the encrypted number of assets has the right to use the Bally-Live-Rewards feature, if the customer has the right to use the feature, they verify the number assets (slot machines) the customer has the right to use the Bally-Live-Rewards feature on. These verifications should be retrieved from the customers Project Manager or their Sales representative.

To generate the encrypted number of assets values:

Access the program AVPR#ASSET and select the Bally-Live-Rewards feature:

Enter the customers Corporate ID:

Enter the customers Property ID:

Enter the customer's iSERIES serial number:

Enter the date (MM/DD/YY) that this control value is to expire; 99/99/99 indicates expiration date of Dec. 31, 2069 (highest date system can support).

Enter the number of assets that this customer is allowed to utilize the Bally-Live-Rewards on; 99999999 indicates unlimited number of assets.

Press F13 to generate the encrypted value.

This encrypted value should now be sent to the customer (e-mail), so that the customer can apply this encrypted value to their iSERIES.

Referring to FIG. **69**

Bally-Live-Rewards Asset Controls are illustrated at panel **6900**:

Bally-Live-Rewards feature requires License Key SMS-015 to be active, and the encrypted number of valid assets must be set. Follow normal license key installation procedures to apply the SMS-015 license key. Once the required license key is activated, the user must set the encrypted number of valid assets, before activating the Bally-Live-Rewards feature. This procedure is as follows:

The customer receives the encrypted number of valid assets for the Bally-Live-Rewards feature.

To apply the encrypted value: From the Main ACSC Menu, select option 50-SMS System Control Menu.

FIG. **70** is a screenshot **7000** of the ACSC iSERIES Live Rewards administration page. This is where the player assigns specific Asset numbers (EGMS or game devices) to run Live Reward System Games. This is also where the encrypted license management keys are entered.

From the first Bally-Live-Rewards activation screen select the mode to Maintain Asset Controls, and press the F7 key.

Bally-Live-Rewards Asset Controls:

Bally-Live-Rewards feature requires License Key SMS-015 to be active, and the encrypted number of valid assets must be set. Follow normal license key installation procedures to apply the SMS-015 license key. Once the required license key is activated, the user must set the encrypted number of valid assets, before activating the Bally-Live-Rewards feature. This procedure is as follows:

The customer receives the encrypted number of valid assets for the Bally-Live-Rewards feature.

To apply the encrypted value:

On the Apply encrypted number of assets screen enter the encrypted value that you received from Bally Support department.

FIG. **71** is a screenshot of panel **7200**, the ACSC iSERIES Live Rewards administration page where a the casino applies the encrypted number of valid assets to Run Live Rewards. Likewise, FIG. **72** is a screenshot of panel **7300**, the ACSC iSERIES Live Rewards administration page where the total number of Asset licenses available and unused are shown. FIG. **73** is screenshot of panel **7300** of the ACSC iSERIES Live Rewards administration page where the site can maintain assets allowed to be part of the System Games. In this example this site has an unlimited number of licenses.

FIG. **74** is screenshot of panel **7400** of the ACSC iSERIES Live Rewards administration page where the site can maintain assets allowed to be part of the System Games. This site has a 5000 licenses available to be assigned.

FIG. **75** is a screenshot of panel **7500** of the ACSC iSERIES Live Rewards administration page where the site can

maintain assets allowed to be part of the System Games. This site has a 5000 licenses available to be assigned. The site is assigning a specific asset number of 525 to be allowed to run the Live Rewards system game product.

FIG. **76** is a screenshot of panel **7600** of the ACSC iSERIES Live Rewards administration page where the site can control various global features.

FIG. **77** is the database schema **7700** for the Live Rewards Server. This database schema **7700** illustrates the relationships between the various data elements in the following table:

Data	Ref. No.
PlayerTypes	7701
PayTableSets	7702
GameMaster	7703
GameSettingsMaster	7704
PayTables	7705
PayLevels	7706
PayLevelAwards	7707
PrizeTypes	7708
GameSettingsLevels	7709
PlayerActivity	7710
ActivePayTableSets	7711
ActivePayTableSetsHistory	7712
PlayerSettings	7713
SessionBucketsHistory	7714
PlayerBannedHistory	7715
PlayerBuckets	7716
PlayerGamesHistory	7717
PlayerMaster	7718
PlayerGames	7719
SessionBuckets	7720
PlayerTransactions	7721
SessionMaster	7722
GameHistoryLog	7723
GameHistoryLogDetails	7724
PrizeTypeMap	7725
iViewMaster	7726
iViewData	7727
iViewDataHistory	7728
UserSessionLog	7729
UserMaster	7730
GlobalSettings	7731
UserChangesHistory	7732
SetupData	7733
HandPayDetails	7734
HandPayTypes	7735
HandPayMaster	7736
ReportConfig	7737
EGMActivity	7738
Notifications	7739
EventLog	7740
TranTypes	7741
SourceTypes	7742

The database schema **7700** represents one embodiment of a database schema suitable for implementation of a database for tracking rewards data, accounting data, player activity, game activity, and many other features. Other embodiments of such a database and other configurations or schema may be used in other embodiments of gaming systems.

Various processes may be implemented in the embodiments described herein. The following processes provide further details of operation of one embodiment of a gaming system and components in the system. FIG. **78** (FIGS. **78-1**, **78-2** and **78-3**) is a flowchart of the Boot-up recovery process of the live rewards games on iVIEW. Process **7800** initiates at module **7805**, and at module **7810** the console boots up. At module **7815**, a determination is made as to whether the NVRAM was left in a Tilt State (e.g. the game was potentially tampered with). If yes, at module **7820** a message is displayed indicating the corrupted state, and the process terminates with module **7822** (the machine is not playable). If the NVRAM is not in a tilt state, then the console sends a registration message to the GMU at module **7825**. It is determined at module **7830** if the registration message returned successfully. If not, then at module **7835** the game displays a message indicating the GMU is unavailable, and the system waits while retrying the GMU.

With the GMU registration completed, the console registers an iView ID with an SGS server at module **7840** and retrieves settings at module **7840**. Note that the process can be started at this point when the system causes the machine to enter this process at module **7842**. At module **7850**, it is determined whether the iView registration succeeded. If not, at module **7852** the tilt games message is displayed, indicating the games are unavailable. At module **7854**, a determination is made as to whether the player played the base game. If so, the process shifts to the legacy attract mode via module **7860**. If the base game was not played, it is determined whether a player tracking card was inserted at module **7856**. If so, the process shifts to the player tracking card inserted process via module **7858**. If not, it is determined whether an employee card was inserted at module **7844**. If so, the process shifts to the employee card inserted override process at module **7846**, and the process attempts iView registration again at module **7840** otherwise.

With a successful iView registration, the console calls Get_Server_Time at module **7848** and determines at module **7862** if there is an open session available. If not, the process shifts to the legacy attract mode via module **7860**. If so, it is determined whether there are any non-Zero PP or TC buckets (do players have points or other saved data on the game). If so, at module **7868**, the saved data is deposited (e.g. points or winnings) at the server at module **7868**. At module **7870**, it is determined whether any open withdrawals still exist. If so, AFT status is checked (whether the status is known) at module **7872**. If not, the game requires a fix by an attendant (e.g. to determine status) and the games unavailable message is displayed at module **7874** with the process terminating at module **7890**. If the AFT status of any withdrawal(s) is known, at module **7876** the withdrawal(s) are terminated, either with a Commit or a Rollback as appropriate.

If there are no open withdrawals, at module **7878** it is determined whether there are any open Handpays, and if so, at module **7880**, the Handpay is ended with a message to the server indicating that the Handpay was not paid. The process then moves to a determination as to whether any open games are present at module **7882**. If so, at module **7884**, the game is ended, either with a score or with no score if the game was incomplete. At module **7886**, the machine sends a message indicating a recovery was accomplished, and the process then moves to the legacy attract mode via module **7860**.

Another process implemented in some embodiments of the system is the attract mode process. FIG. **79** is a flowchart of the Attract mode logic. Process **7900** initiates at module **7905** and shows a legacy attract sequence at module **7910**. It determines at module **7915** if a player tracking card was inserted. If so, it determines whether uncarded play points need to be saved at module **7945**, and sends the uncarded play points to the server at module **7950**. The process then shifts to the player card inserted process via module **7960**.

If no player card is inserted, then at module **7920**, the machine determines if it needs to save uncarded play points. If so, then at module **7970**, the process determines whether the player is playing a base game. If so, the console adds the play points and TC to an internal counter. The process then moves to module **7930**, and a determination is made as to

whether the machine needs to get settings. If so, it gets settings at module **7940**. The process then returns to module **7910**.

Another process is used in some embodiments when the player card is inserted. FIG. **80** is a flowchart of what happens at Player Card insertion time. Process **8000** starts at module **8005**. At module **8010**, it is determined whether the iView is registered and active. If not, the process shifts to the legacy player process via module **8015**.

If so, it is determined whether the player is at the Handpay screen at module **8020**. If so, then at module **8040**, the process determines if the same card is associated with the Handpay (or has a different card been inserted). If so, the console stays at the Handpay screen at module **8050**, and shifts to the jurisdictional handpay process via module **8055**. If a different card is involved, then at module **8060**, the handpay process is rolled back and at module **8070** the session for the previous card is closed.

The process then moves to module **8030**, and a new session is created. The console also sends the game data to the server at module **8080**. The process then shifts to the legacy player process via module **8015**.

Another process used in some embodiments is the legacy attraction process or legacy player pages. FIG. **81** is a flowchart of what happens when the player interacts with the Legacy Player Pages. Process **8100** initiates at module **8105** and proceeds to module **8110** where the main legacy page or screen is displayed. At module **8115**, it is determined whether the player pressed a legacy button. If so, then at module **8150**, the legacy menu shows the proper page and the legacy system operates. If not (no legacy button pressed), then at module **8120** it is determined whether the iView system is registered and active. If not, then at module **8125** it is determined whether the player has pressed a "Play Game" or similar button. If not, then at module **8140**, it is determined whether the player has removed the player card. If so, the process transitions to the player card removed process via module **8145**.

If the player card has not been removed, the process returns to the determination of module **8115** (whether a legacy button was pressed). If the player did press a "Play Game" or similar button as determined at module **8125**, the process moves to module **8130** and the games unavailable screen is shown. At module **8135**, the game continues its attempts to register with iView or the rewards system and returns to the determination of module **8115**.

If iView or the rewards system is registered and active at module **8120**, the process determines at module **8155** whether the player session is open. If not, the console attempts to open the player session at module **8160**. If the player session is still not open at module **8165**, the process moves to the determination at module **8125**. If the player session is open at either modules **8155** or **8165**, then the process determines at module **8170** whether the current player is banned. If so, then at module **8172**, the process determines whether the player has attempted to play the game (e.g. pressing a "Play Game" button). If so, a screen is displayed at module **8174** indicating the player cannot play and should see customer service (e.g. stating the player card is inactive). The process then returns to module **8115**.

If the player is not banned, then at module **8176** it is determined whether the player has attempted to start the game. If so, the process transitions to the system game console main screen process via module **8178**. If the player has not started the game, then it is determined whether the player has navigated on iView at module **8180**. If not, at module **8185**, the threshold for the next game on iView is checked. If the threshold is exceeded, then a time counter of 30 seconds is checked to see if the time has elapsed at module **8190**. If so (the time has elapsed), the process transitions to the system game console main screen process via module **8178**. If the time has not elapsed (at module **8190**), if the threshold has not been met (at module **8185**) or if the player has not navigated iView (at module **8180**), then a determination is made at module **8195** as to whether the player has removed their card. If yes, the process transitions to the player card removed process via module **8145**. If no, the process returns to the determination at module **8115**.

The system game console main screen provides the process which operates games on the machines within the system. FIG. **82** is a flowchart of what happens on the System Game Console Main game screen. Process **8200** initiates with start module **8205** and determines at module **8210** whether any jurisdictional buckets are non-zero (greater than zero). If not, then at module **8212**, the console shows cash winnings in the winnings box. If so, then at module **8214**, the console shows the jackpot in the winnings box. The console then shows the main screen at module **8216**. At module **8220**, it is determined whether the player tracking card has been removed. If so, the process transitions to the player tracking card removed process via module **8222**.

If the player tracking card is present, then at module **8224** it is determined whether the player account button has been pressed. If so, the process transitions to the legacy pages process at module **8226** to allow access to account information. If not, it is determined at module **8228** whether more than 1 game is available to the player. If so, then at module **8230**, it is determined whether the player has pressed the next game button or a similar indicator. If so, at module **8235**, the next game is displayed (in a loop of games) and the process returns to module **8216**. If not (no next game button pressed), then at module **8240**, it is determined whether the player pressed a last game or previous game button or indicator. If so, the previous game in a loop is shown at module **8245** and the process returns to module **8216**.

If not (no previous game request), or if only one game was available at module **8228**, then at module **8250** it is determined whether the player has any cash winnings. If the player has cash winnings, it is determined at module **8255** whether the player has requested collection of the winnings. If so, then the process transitions to the collect pressed process at module **8260** to allow the player to collect winnings. If not, or if the player had not cash winnings, it is determined at module **8265** whether the player requested help. If so, the process transitions to the help/pays process via module **8267**.

At module **8270**, a determination is made as to whether the player pressed the game button (play a game, etc.) If so, at module **8275**, the console loads the game and the process transitions to the game flow process at module **8277**. If no game button press, the process determines at module **8280** whether the player has requested to play the base game. If not, the process returns to module **8216**. If so, the process plays the base game and at module **8285** tracks the base game in relation to accrual of player points and winnings. At module **8290**, the console adds the player points to the player's winnings and at module **8295**, the console displays the player's points and rewards level. The process then returns to module **8216** and display of the system game page.

In the operation of the system, help may be requested by a player. FIG. **83** is a flowchart of what happens when the player enters the Help/Rewards pages on the iView. Process **8300** initiates at module **8305**. At module **8310**, it is determined whether the player is viewing a rewards page. If so, then at module **8340**, the appropriate paytable is shown. If the

player requests help, this is determined at module **8345**, and the first help page is shown at module **8347**. If the player is viewing the rewards page but is not requesting help, the player can navigate the rewards page, with a left or right arrow press determined at module **8350** (and corresponding page display at module **8355**), and a similar up or down arrow press determination at module **8365** (and corresponding page display at module **8367**). Each of these processes then return to module **8310**.

If the player removes the tracking card at module **8370**, the process transitions to the player card remove process via module **8337**. If the player does not navigate and does not remove the player tracking card, a determination is made at module **8380** whether the player closed the rewards page. If not, a determination is made as to whether the player played the base game at module **8375**. If the player did not play the base game, the process returns to module **8310**. If the player did play the base game, or closed the rewards panel, then at module **8385** it is determined whether the system console launched the help page. If not, the process transitions to the game flow process via module **8395**. If so, the process transitions to the system game main screen at module **8390**.

If, at module **8310**, the player is not viewing a rewards page, then at module **8315** the first help page is shown. At module **8320**, it is determined whether a player rewards button was pushed. If so, at module **8325**, the current rewards level is shown. If not, then at module **8330**, it is determined whether the player is navigating the help pages (e.g. left or right arrow pushed). If so, the next help page corresponding to the navigation is displayed at module **8360** and the process returns to module **8310**. If not, it is determined whether the player removed the card at module **8335**. If so, then the process transitions to the player card remove process via module **8337**. If not, the process moves to module **8380** to determine if the player closed the help screen.

Another process which may be executed in the various embodiments is the game play process. FIG. **84** is a software flowchart of what happens during the game play process. Process **8400** initiates with module **8405**, and proceeds to module **8407** where the game is started. Module **8407** illustrates loading of the game, and at module **8410**, it is determined whether the game has loaded. If no, then at module **8428**, it is determined whether the player is playing the base game. If so, the process transitions to the game flow process (for the base game) via module **8448**. If not, it is determined whether the player removed the player card. If so, then at module **8452**, the process transitions to the player card removed process via module **8452**. If not, it is determined whether the player accessed the menu. If so, the process transitions to the system game console main screen process via module **8456**. If not, at module **8458**, it is determined whether the console sent a menu press, hide, or unload game command. If it did, then the process transitions to the system game console main screen process via module **8456**. If not, then at module **8430** it is determined whether the player accessed the rewards information. If so, then at module **8430** the process transitions to the help/rewards (or pay) process via module **8432**. Otherwise, the process loops back to loading the game and checking for loading at module **8410**.

Once the game is loaded, at module **8412**, the game sends a begin game message to the console or machine. At module **8414**, the points and cash in the player account is transferred to the server. At module **8416**, the required points and cash are deducted or reserved. At module **8418**, the process determines if the game is responding. If not, at module **8420**, the process determines if the response has failed three times. If not, the process loops back to module **8416**. If the time out has occurred three times, the process moves to module **8422** and the games unavailable message is displayed. If the game does not time out, at module **8424**, it is determined whether the game response failed. If so, the process likewise moves to module **8422**. If the process fails and gets to module **8422**, on the other hand, the process transitions to the server connection lost process via module **8446**.

If not (the game response succeeded), the process returns a good game response at module **8426** and the game plays per individual specifications at module **8434**. Eventually, the game sends an endgame message to the console at module **8436** and the console saves the state in NVRAM at module **8438**. At module **8440** the console returns an award string for display, at module **8442** the console sends an end game message to the server with the winnings, and at module **8444** the game finishes and shows the results to the player.

At module **8460**, the game continues to show its last results. At module **8462**, it is determined whether the player has played the base game. If so, then the process transitions to the game flow via module **8448**. If not, at module **8464**, it is determined whether the player requested the menu. If so, the process transitions to the system game console main screen via module **8456**. If not, at module **8466**, it is determined whether the player touched the game over dialog box. If not, then at module **8468** it is determined whether the console sent a menu press, hide, or unload game command. If it did, then the process transitions to the system game console main screen process via module **8456**. If not, the process returns to module **8460**.

If the player did touch the game over dialog box at module **8466**, then at module **8470** the game checks whether show results was sent, and sends it if necessary, then waits a delay before sending a collect message to the console. At module **8472**, it is determined whether the prize is bonus points only. If not, the process transitions to the cashout pressed process via module **8476**. If so, the console sends messages to the game indicating the points have been added, and the process transitions to the game flow process via module **8448**.

In general, the cashout pressed process handles cashing a player out. FIG. **85** is a software flowchart of what happens during the cash out process. The process **8500** initiates at module **8502**, and at module **8504** sends a query as to whether a player is locked. At module **8506**, a determination is made as to whether the player is locked. If yes, the console tells the player to see customer service at module **8508** and the process transitions to the system game console main screen via module **8510**. If not, the process shows a PIN interface to the player at module **8512**.

If the player cancels, this is determined at module **8514**, and the process transitions to the system game console main screen via module **8510**. If the player removes the player card, this is determined at module **8516**, and the process transitions to the player card removed process via module **8518**. Otherwise, the process determines if a PIN has been entered at module **8520**, and waits for a PIN cycling through modules **8514** and **8516**.

With the PIN entered, the process sends a validate PIN message to the server at module **8532**. At module **8534**, the server attempts to validate the PIN and returns a corresponding message. At module **8536**, it is determined whether the PIN is good. If not it is determined at module **8538** whether the player is now locked out. If so, then at module **8540** a message is displayed telling the player the account is locked, and to either wait or see customer service. The process then transitions to the system game console main screen via module **8510**.

If the player is not locked out, a message is displayed giving the player another chance at module **8530** and it is determined whether the player pressed a re-enter button at module **8524**. If so, the process returns to module **8512** and display of the PIN pad. If not, it is determined if the player cancelled at module **8526**. If yes, the process transitions to the system game console main screen via module **8510**. If no, it is determined whether the player removed the player card at module **8528**. If yes, the process transitions to the player card removed process via module **8518**. If no, the process loops back to module **8524**.

If the player enters a valid PIN, then at module **8542** it is determined whether the player has both a regular cashout and a jackpot. If not, if the player has only a regular cashout at module **8554**, the process transitions to module **8544** via module **8546** (this will be detailed below). If so jackpot only) the process transitions to the jurisdictional handpay process via module **8522**.

If the player has both a jackpot and a cashout amount, a variety of options are displayed at module **8548**. At module **8550**, it is determined whether the player requested collection of the regular win. If not, at module **8556**, it is determined whether the player requested the jackpot payout. If so, the process transitions to the jurisdictional handpay process via module **8522**. If not, it is determined whether the player cancelled at module **8558**. If yes, the process transitions to the system game console main screen via module **8510**. At module **8560**, it is determined whether the player removed the player card. If so, the process transitions to the player card removed process via module **8518**. If the player did not cancel or remove the player card, the process loops back to module **8550**.

If the player requests payment of the regular win amount at module **8550**, at module **8552** options are displayed allowing the player to withdraw a desired amount. Likewise, module **8554** takes the process to module **8552**. If the player selects an amount, this is determined at module **8562**, and the process transitions to the regular cashout process via module **8564**. If the player has not selected an amount, cancellation can be detected at module **8566** and card removal can be detected at module **8568**. If the player cancels, the process transitions to the system game console main screen via module **8510**. If the player removes the card, the process transitions to the player card removed process via module **8518**.

Another process frequently used is the regular cash out process. FIG. **86** is a software flowchart of what happens during a regular cash out procedure. Process **8600** initiates with module **8602**, and then proceeds to a determination of whether a player entered a valid cash amount at module **8604**. If not, at module **8618**, the player is told the amount is not valid and offered the chance to select again. The process then checks whether the player chose to re-enter, cancel, or remove the player card. At module **8620**, it is determined whether the player chose to re-enter an amount. If so, the process transitions to the cashout pressed process via module **8630**. At module **8622**, it is determined if the player cancelled the process. If so, the process transitions to the system game console main screen via module **8628**. At module **8624**, it is determined whether the player removed the player card. If so, the process transitions to the card removed process via module **8626**. If not, the process loops back to module **8620**, to allow for one of cancellation, re-entry or removal of the player card.

If the player entered a valid cash amount, at module **8606** the console shows a transfer to the primary game. At module **8608**, the console requests the withdrawal from the server. At module **8610**, the console initiates the transfer. At module **8612**, a determination is made as to whether the transfer status was unknown. If so, at module **8614**, a tilt mode is entered, and the player is advised to request service. The process then terminates at module **8616**.

If the transfer status is not unknown, at module **8634**, it is determined whether the transfer was successful. If so, then at module **8644**, a message indicating a successful transfer is displayed. If not, then at module **8636** it is determined whether the transfer was partially successful. If so, at module **8642**, a message describing the partial transfer is displayed. In either case, the process then moves to module **8646**, and commits the transfer. At module **8632**, it is determined if the player removed the player card. If so, the process transitions to the player card removed process via module **8626**. If not, the process transitions to the system game console main screen via module **8628**.

If the transfer is not even partially successful, then at module **8638**, it is determined whether the player card was removed. If so, the process transitions to the player card removed process via module **8626**. Otherwise, it is determined whether the fail code indicates the transfers will never work (e.g. the system is down) at module **8640**. If not, then at module **8650**, it is determined if the transfer was attempted three times. If the transfer was attempted three times, or if the fail code indicates the transfer will never work, then at module **8656** a message is displayed indicating the transfer failed and the player can either continue playing or collect by hand. Collecting winnings later (continuing to play) is addressed below. If the player presses a call attendant button, then at module **8660** the console ends the withdrawal indicating the withdrawal was cancelled, and the process transitions to the jurisdictional handpay process via module **8662**. If the player removes the card, then at module **8658** the console ends the withdrawal indicating the withdrawal was cancelled, and the process transitions to the player card removed process via module **8626**.

If the transfer has failed but fewer than three times (module **8650**), and may still succeed (module **8640**) then at module **8652**, a message is displayed indicating failure and a reason for failure, such as Game Full or Game Busy is provided, along with the option to try again or collect winnings later. If the selection is collect winnings later, then at module **8654**, the transfer is cancelled and rolled back. The process then transitions to the system game console main screen process via module **8628**. Note that module **8654** may also be reached from module **8656** as a result of a similar choice to collect winnings later.

If, at module **8652**, the player card is removed, the process ends the withdrawal at module **8648** and then transitions to the player card removed process at module **8626**. If the player tries the withdrawal again from module **8652**, the process returns to module **8610** and attempts the transfer again.

One of the options for paying winnings is a jurisdictional handpay. FIG. **87** is a software flowchart of what happens during a jurisdictional Hand pay. Jurisdictional payouts at the gaming device for awards won by playing games on iVIEW. Hand Pay for these types of wins. (See FIG. **19**, FIG. **20**, FIG. **30**). These are for hand payments for bonus game awards over the jurisdictional amount (typ. $1200) on the iVIEW. This differs from Base Game hand payouts which are logged in the base game. FIG. **30** shows where this value is configured at the Server. Any game award payout over this amount will trigger a hand pay event for this dollar amount. To collect this amount the player must do a hand pay on any iVIEW on the floor. We hand pay the amount wherever the player tries to collect the winnings. Slot machines lock up only the specific machine that the award occurred upon. So even if a player

won $1500 on one machine and pulled his card and went to another machine and inserted his card and tried to collect the winnings, This player would have to have the amount Hand paid verses being allowed to AFT to the base game. We maintain the jurisdictional buckets for the player independent of the device he played upon.

Process **8700** initiates with module **8705** and the console shows the handpay amount at module **8710**. At module **8715**, the console sends a message to the server to start the handpay process. At module **8720**, the console sends a further message for tracking of the handpay. At module **8730**, it is determined whether the player cancelled. If so, then at module **8445**, the handpay process is cancelled with a zero transaction amount, and the process transitions to the system game console main process via module **8750**. Alternatively, at module **8735**, the player card may be removed, in which case the process transitions to the player card removed process at module **8740**. If the player neither cancels nor removes their card, pressing the attendant call button should transition the process to module **8755**.

At module **8755**, the process initiates and at module **8760**, it is determined whether the player has inserted their card. If so, then the process transitions to the player card inserted process via module **8790**. If not, it is determined at module **8765** whether an employee has inserted their card. If not, the process returns to module **8760**. If so, the process determines whether the GMU is working at module **8770**. If not, the employee takes the machine out of service until the connection is fixed and processes the handpay at the cage at module **8788**.

If the GMU is working, then at module **8772**, the gaming machine displays the handpay information. At module **8774**, it is determined whether the employee removed their card. If so, then at module **8776**, the process transitions to the initiation module **8755**. If not, at module **8778**, it is determined whether the employee cancelled the handpay. If so, at module **8784** the game awaits removal of the employee card, and at module **8786**, the process transitions to the jurisdictional handpay, employee cancel process. If the employee did not cancel, it is determined whether the employee committed the transaction at module **8780**. If so, at module **8782**, the process transitions to the employee commit jurisdictional handpay process. If not, the process cycles back to module **8774**.

When processing a handpay, the most likely results are an employee commit or cancel process. FIG. **88** is a software flowchart of what happens when the employee commits the hand pay. Process **8800** initiates with module **8805**, and at module **8810**, the console sends the message committing the handpay to the server. At module **8812**, a timeout is checked. If the message times out, at module **8855**, it is determined whether this was tried three times. If no, the process retries at module **8810**. If so, a message indicating failure is displayed at module **8852**, and the process terminates at module **8860**.

If the message does not time out, an error code is checked at module **8814**. If the error code is zero (error code is no error), then the process closes the session at module **8816**. Another message timeout is checked at module **8818** (for closing the session). If the message times out, at module **8835**, it is determined whether this was tried three times. If not, the process cycles back to module **8816** to close the session again. If so, the console displays an error indicating the transaction completed but the session did not close at module **8840**, and the process terminates at module **8850**. If the message does not time out, then at module **8820** a message displays confirming winnings should be paid, and that reward points are being saved (have been saved). At module **8825**, it is determined whether the employee card has been removed. If not, the process returns to the display module **8820**. If so, the process transitions to the legacy attract mode at module **8830**.

If there was a server error at module **8814**, then at module **8842**, server error code **42** is checked (a predetermined server error code). If this is not the error code, the machine tilts at module **8865**, indicating a software bug, and the process terminates at module **8850**. If server error code **42** is found, then at module **8844**, the session is closed via message to the server. At module **8846**, a time out is checked for the message. If the time out occurs, then at module **8848**, it is determined if this was tried three times. If so, the process transitions to module **8852**. If not, the message may be retried at module **8844** or the process may simply wait for a time out at module **8846**.

If the message does not time out at module **8846**, the console tells the employee the handpay was cancelled at module **8870**. The employee may then determine if the handpay was paid out elsewhere (e.g. the cage, another terminal, etc.) or if the handpay has yet to be paid. At module **8875**, the process determines whether the employee card has been removed. If not, the process waits for this event. If so, the process transitions to the legacy attract mode at module **8830**.

Another option is for the employee to cancel the handpay. FIG. **89** is a software flowchart of what happens when the employee cancels the hand pay. Process **8900** initiates with module **8905**, and the console sends a cancellation message at module **8910**. At module **8915**, time out on the message is checked. If the message times out, at module **8920**, it is determined whether the message timed out three times. If not, the message is retried at module **8910**. If so, the console indicates it could not connect to the server at module **8925**, and the employee takes the machine out of service. At module **8930**, the process transitions to the server connection lost process.

If the message completes at module **8915**, then at module **8940**, the console sends a close session message. At module **8945**, the close session message time out is checked. If the message times out, at module **8950**, it is determined whether the time out occurred three times. If not, the message is retried at module **8940**. If so, the console indicates it could not connect to the server at module **8935**, and the employee takes the machine out of service. At module **8930**, the process transitions to the server connection lost process. If the message does not time out, the process waits for removal of the employee card at module **8960**, and then transitions to legacy attract mode via module **8970**.

Oftentimes, the player card may be removed. FIG. **90** is a software flowchart of what happens when the player removes the player card. Process **9000** initiates with module **9005** and determines whether a player session is open at module **9010**. If not, the process transitions to the legacy attract process via module **9015**. If so, the process determines if the player was at a handpay screen at module **9020**. If so, the console deposits play points and threshold counter at the server at module **9025** (failure here is handled through the server connection lost process). At module **9030**, the console continues to display the handpay screen, and at module **9035**, the process transitions to the jurisdictional handpay process.

If the console was not at a handpay screen, at module **9040** it is determined whether a game was in progress. If so, then at module **9045** the console waits for the game to end. At module **9050**, the console sends the end game message and at module **9055**, the console sends the menu pressed message and waits for a display of results.

Whether a game was in progress or not, the console deposits play points and the threshold counter at module **9060**. At

module **9065**, the console sends the close session message to the server. At module **9070**, the console sends the end game data message to the server. The process then transitions to the legacy attract process via module **9015**.

A connection to the server may be lost, in which case the machine experiences an override process. FIG. **91** is a software flowchart of what happens when the server connection is lost from the iVIEW. Process **9100** initiates at module **9110**. At module **9120**, the console has sent a message three times and it has timed out. At module **9130**, a game unavailable message is displayed. At module **9140**, the console sends a test message to the server. At module **9145**, time out is checked. If the message times out, the process returns to module **9130**. If the message does not time out, at module **9150** all unsent (queued) messages are sent to the server. At module **9160**, it is determined whether any of these messages timed out. If yes, the process again returns to module **9130**. If not, at module **9170**, it is determined whether the player card is still inserted. If not, the process transitions to the player card removed process at module **9180**. If so, the process transitions to the system game console process at module **9190**.

In some instances, autoplay may be invoked. FIG. **92** is a software flowchart of how the Autoplay logic works. Process **9200** initiates at module **9205**, and at module **9210**, the autoplay setting is checked. If autoplay is off, the process terminates at module **9288**. Otherwise, if iView is not at the console main screen at module **9215**, the process terminates at module **9286**. At module **9220**, if the player has navigated on iView during the session, the process also terminates at module **9286**. The process is not invoked when these indicia indicate a relatively active machine.

At module **9225**, the autoplay timer is checked. If it is not on, at module **9230** the timer is turned on. At module **9235**, it is determined whether the player navigated on iView. If so, the autoplay timer is turned off at module **9245** and the process terminates at module **9250**. If not, at module **9240**, an abandon card state is checked. If this is present, then at module **9250** the autoplay timer is reset and the process returns to module **9235**.

If the abandon card state is not present, a tilt state is checked at module **9255**. If the machine is in tilt mode, at module **9270** the autoplay timer is turned off, and the process terminates at module **9282**. If the machine is not in tilt state, at module **9260**, a warning is shown in the prompt area (e.g. the machine is about to automatically play a hand of poker). At module **9265**, the autoplay timer is checked. If the time has not exceeded the limit, then the process returns to module **9235**. If the time has exceeded the limit, than at module **9275** the console launches the appropriate game based on the state of the card and the accrued points. The process then transitions to the game flow process via module **9280**.

In some instances, an employee card may be inserted. FIG. **93** is a software flowchart of what happens when the employee card is inserted. Process **9300** initiates at module **9310**. At module **9320**, an employee card insertion is detected. At module **9330**, a determination is made as to whether the player is in a game. If so, the console waits for the game to end at module **9340**. The process then shows the employee legacy menu at module **9350**. At module **9360**, it is determined whether the employee card was removed. If not, the process loops back to the menu at module **9350**. If so, the process goes to the legacy attract process at module **9370**.

In some instances, a heartbeat timer may override other processes. FIG. **94** is a software flowchart of heartbeat messages from the iVIEW to the Live Rewards server or SGS. Process **9400** initiates at module **9410** and determines at module **9420** whether a message was sent and received from the server. If so, the heartbeat timer is reset at module **9480** and the process terminates at module **9490**. If not, at module **9430**, it is determined whether the heartbeat timer has expired. If not, the process terminates at module **9440**. If so, the console sends a time request to the server at module **9450**. Additionally, the console sends game data to the server at module **9460**, and terminates the process at module **9470**. Thereby, the system is always updated, at least about every 14 minutes in one embodiment.

Other override conditions may occur, too. FIG. **95** is a software flowchart of what happens when abandoned player cards or directed messages come in from the Game monitoring unit. Process **9500** initiates at module **9505** and at module **9510** a message relating to an abandoned card or a directed message is received. At module **9515**, a current game is checked. If there is a current game, at module **9590**, the console ends the game with a menu pressed message and waits for game termination. If there is no game in progress, at module **9520** it is determined whether a withdrawal was started. If so, the console waits for completion of the transaction at module **9525**. If no withdrawal, at module **9570**, it is determined whether the player is at a handpay screen. If so, if the player does not cancel at module **9575**, the handpay is processed at module **9580** and the process terminates at module **9585**.

If the handpay is cancelled, if no handpay was in progress, or if the process is transitioning from modules **9590** or **9525**, the process moves to module **9530** and determines is an abandoned card message was received. If so, the console goes to the abandoned card screen and continues to accrue player points and the threshold counter at module **9535**. At module **9540**, it is determined whether the player card was removed. If not, the process returns to module **9535** and if so, the process transitions to the player card removed process via module **9545**.

If no abandoned card message was received, the console shows legacy pages at module **9550** until the timer for the pages is complete. At module **9555**, it is determined whether the player card is still in. If not, the process transitions to the legacy attract mode via module **9560**. If so, the process transitions to the system game main console screen via module **9565**.

Another possibility is failure of NVRAM. FIG. **96** is a software flowchart of what happens when the writing to the non-volatile memory fails. Process **9600** initiates with module **9610** and at module **9615**, an NVRAM failure is detected. The console sends an error message to the server at module **9620**. At module **9625**, the console attempts to send in log data. At module **9630**, a determination is made as to whether a game was in progress. If so, at module **9665** the console sends an end game message with score and winnings. At module **9670**, the console unloads the game. At module **9635**, the console sends any play points and threshold counter data to the server and any withdrawal information, regardless of whether a game was in progress. At module **9640**, a tilt message is displayed. At module **9645**, a technician takes the machine out of service and may need to clean up the player session at another terminal (e.g. a cage terminal). The process terminates at module **9650**.

The following lists the proposed features that make up the player's account movements:

On the server:

There may be a player account that contains (not limited to):

a) Useable Play Points

b) A Threshold Counter value

c) Un-transferred Bonus Points (BP's)

d) Un-collected Cash Winnings

This account may be accessible at all times to any number of cards that are inserted into an iVIEW.

When the LIVE REWARDS SERVER receives a card-in from an iView it may make a reserve account for that player linked by:

a) Card number

b) IView ID

LIVE REWARDS SERVER may transfer the contents of the player's account into the reserve account for use by this player.

The reserve account may have a date/time stamp that is updated each time the iView either:

a) Deposits PP, TC, BP, or cash

b) Transfers cash via AFT to base game

c) Does a Begin Game or End Game call

d) Sends a 'heartbeat' message

If the date/time stamp is ever older than X minutes (server configurable) the values in the reserve account may rollback into the player's account.

On Begin game PP's and TC's are deducted from the reserve account to fund the game selected by the player.

On End Game: winnings from the played game are added into the player's reserve account.

Any BP's are immediately sent to the CMS from LIVE REWARDS SERVER.

On card-out the remaining values in the reserve account may roll back into the player's account.

Deposits from the iView in recovery mode are put in the player's account and any reserve account for this card #/iView ID are rolled back.

USE OF RANDOM NUMBER GENERATOR

Boom Bingo and Payday Poker utilize an RNG for parts of their game play. The specific RNG used is a KISS algorithm. Both games use the System Game GDK, KissRNG. It is used in the following way:

1. When a Game (such as Boom Bingo) Loads, the kiss-RNG class is seeded with the TickCount. This is the number of milliseconds elapsed since this device has booted: seed_rand_kiss((uint) (System.Environment.TickCount%uint.MaxValue));

2. Each gameloop (approximately 20 times per second), the random number is churned: rand_kiss( ); //Churn RNG

3. When a base games is played on the cabinet (a player generated event), the Random is reseeded with the next value of the current seed: if(id==CMGDKSystemMessage.BaseGameStart) seed_rand_kiss(rand_kiss( ));

4. When a enough Base games have been played to start a System Game (Bingo or Poker), the Game may use the rand_kiss( ); as many times as needed to generate its outcome.

Usage of Random in Boom Bingo

Bingo uses the RNG in 2 ways:

To generate the bingo cards

To draw the balls

To generate a bingo card the game:

1. Picks a random number between 1 and 15 for the first column.

2. Repeats 5 times. Once for each square in the first column.

3. If a duplicate random number is picked, another random number is picked until all numbers within the column are unique.

4. Repeat the process for the other 4 columns using the following rules for the range of numbers:

column 1 (B) 1 thru 15
column 2 (I) 16 thru 30
column 3 (N) 31 thru 45
column 4 (G) 46 thru 60
column 5 (O) 61 thru 15

When drawing the balls the game:

1. Picks a random number between 1 and 75.

2. Repeat for all 10 balls that are displayed to player.

3. If a duplicate random number is picked, another random number is picked until all balls have a unique number.

Usage of Random in Poker

Poker uses the RNG to shuffle the deck of cards

To shuffle the deck:

1. A deck Object of 52 unique cards exists.

2. Starting with the first card in the deck a random card in the deck is selected. That card is swapped with the first card.

3. This process continues for all 52 cards in the deck.

4. If on any given card, the random card that was chosen is the current card, the card may not move.

5. This shuffle process may go through the deck 7 times.

6. The deck is then verified for accuracy to ensure no duplicates exist. In the case of a duplicate being found the deck may be reset to an ordered deck (ace-king for each suit) and then pass through the shuffle process again.

7. The deck is not ordered at the beginning of each hand. The deck from the prior hand is used and shuffled.

Bally Live Rewards Message Interface Definitions

Bally Live Rewards Server (BLRS) communicates with iVIEW's through Web Services over http/http(s). The following Web Service methods are provided by the Bally Live Rewards Server:

Name	Purpose
registerIView	Register's the iVIEW with BLRS
getSGSDateTime	Returns the current BLRS Date time
getGlobalSettings	Returns the global settings for Live Reward Games
getAllPlayerSettings	Returns the player settings including available games, game start rules and play point value for all the player types
postEventLog	Logs the event message in to BLRS
getActivePayTableSets	Returns the active pay table sets, game settings for all the games and player types
getPayTableSet	Returns the requested pay table set object
unRegisterIView	Un registers the iVIEW with BLRS
SGS_CreateSession	Creates the Session for request player on a specified iVIEW and also returns weather the requested device is active or not.

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Name	Purpose
SGS_ValidatePin	Validates the player PIN number with CMS/CMP
SGS_IsPlayerLocked	Verifies with the BLRS and returns weather the player is locked or not and also returns the time in minutes, how long that player will be locked
SGS_GetSessionBuckets	Returns the all player current session bucket balance values
SGS_Deposit	Deposits the requested player bucket transaction value in to the BLRS
SGS_StartWithdrawal	Initiates the withdrawal transaction with BLRS for a specified player bucket transaction value in BLRS
SGS_EndWithdrawal	Closes the opened withdrawal transaction
SGS_BeginGame	Initiates the begin game transaction with BLRS
SGS_EndGame	Closes the opened game play transaction
SGS_StartHandpay	Imitates the hand pay transaction with BLRS
SGS_EndHandpay	Closes the opened Hand pay
SGS_CloseSession	Closes the opened session
SGS_EGMGamePlay	Posts the EGM activity. i.e., total coin In, total coin Out and No-of games played to the BLRS.
SGS_QueryGameplayLog	Returns the game play transactions log for the requested device
SGS_QueryWithdrawals	Returns the withdrawal transactions log for the requested device
SGS_QueryHandpayLog	Returns the hand pay transactions log for the requested device

Services Specs

Return Values

All web services will return an object. All return objects inherit from the same base class and therefore always contain the following fields:

Response Parameter Name	Purpose
Result	Call result: 0 - success, non-zero - failure
errorString	Error description (empty if success)

Error Codes

Error Description	Error Code
GENERIC_SYSTEM_ERROR	−1
SUCCESS	0
SUCCESS_WITH_DUPLICATE_TRANSACTION	1
INVALID_PARAMS	2
SESSION_ID_INVALID	10
SESSION_SUSPENDED	11
SESSION_CLOSED	12
SESSION_VALIDATION_FAILURE	13
SESSION_CLOSE_FAILURE_PENDING_TRANSACTIONS	14
INSUFFICIENT_FUNDS	20
INVALID_SESSSION_DEPOSIT_NUMBER	21
INVALID_SESSSION_WITHDROWAL_NUMBER	22
TRANSACTION_ID_INVALID	23
TRANSACTION_VALIDATION_FAILURE	24
ATTEMPT_TO_ROLLBACK_COMMITED_TRANSACTION	25
ATTEMPT_TO_COMMIT_ROLLEDBACK_TRANSACTION	26
NON_JURISDICTION_WITHDRAWALS_ONLY	27
JURISDICTION_WITHDRAWALS_ONLY	28
INVALID_HANDPAY_ID	40
HANDPAY_VALIDATION_FAILURE	41
ATTEMPT_TO_COMPLETE_CANCELLED_HANDPAY	42
ATTEMPT_TO_CANCEL_COMPLETED_HANDPAY	43
ATTEMPT_TO_COMPLETE_COMPLETED_HANDPAY	44
CMS_FUNCTION_FAILED	70
INVALID_HID	80
LAST_ERROR	10000

Web Service: registerIView

The purpose of this message is to create a unique iVIEW Id on the Live Rewards Server; if that specified iVIEW Id (machine address of a device) already exists in the BLRS database it updates the related information with the same iVIEW Id. All the information that is stored along with the unique iVIEW Id is reference purpose to identify the device and its location.

Request Parameter Name	Purpose	Type/Range
iviewId	Machine address of iVIEW device	0-50 characters
casinoId	Unique for each casino	0-4 characters
gameSerialNo	Serial number of cabinet	0-40 characters
gameId	Manufacturer type	0-5 characters
payTableId	Unique Pay Table Id	0-6 characters
basePer	Theoretical pay back	0-10 characters
gmuTime	Gmu time	0-6 characters
maxBet	Max bet for game	0-12 characters
gmuId	Gmu network address	0-32 characters
protocolVersion	Version number of protocol	0-16 characters
enableFeatures	SAS related bit mapped field of features the game has enabled	0-6 characters
gameType	Type of ecash game	0-3 characters
Enable	Enable or disable Live Rewards Game messaging	True/False
denomination	No-of pennies in credit for game played	0-12 characters
totalCoinIn	Coin in game meter in pennies	0-12 characters
totalCoinOut	Coin out game meter in pennies	0-12 characters
gamesPlayed	No-of games played	0-12 characters
assetId	Unique identifier to the casino for the cabinet	0-8 characters
Response Parameter Name		
isActive	iVIEW device is active or not in the BLRS	True/False
Result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: getSGSDateTime

The purpose of this message is to sync the iVIEW device clock with the Live Rewards Server clock. This message returns the current Live Rewards Server date and time.

Request Parameter Name	Purpose	Type/Range
None		
Response Parameter Name		
Result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters
CurrentDateTime	Current Live Rewards Server date and time	Date and time object

Web Service: getGlobalSettings

The purpose of this message is to control the Live Rewards games/console on iVIEW depending on the settings defined on the server side. It returns the Global settings (these settings are common for all the iVIEW's) defined on the Live Rewards Server.

Request Parameter Name	Purpose	Type/Range
IviewId	Machine address of iVIEW device	0-50 characters
Resync Interval	Resync interval rate in mins for iVIEW to request the global settings, active pay table sets and player type settings from BLRS.	Double
System game mode volume	Live Rewards game volume in percentage	Int
Attract mode volume	iVIEW attract mode volume in percentage	Int
Auto Play	True - auto play enabled, False - auto play disabled	True/False
*Tilt Time	Time in mins to tilt the system games	Int
*Auto Remove Play points	Time in minutes to clear the not used Live Rewards game play points on the device. 0 = this feature is OFF	Int
Jurisdictional Limit	Array of Prize Type Limit objects. Each object contains prize type Id and limit number	Double

*Means not used

Web Service: getAllPlayersSettings

It returns the player settings including accrual rate, Live Rewards game start threshold counter and Live Rewards game start rules for all the player types (ex: Gold, Silver, etc.) defined on the BLRS

	Purpose	Type/Range
Request Parameter Name		
IviewId	Machine address of iVIEW device	0-50 characters
Response Parameter Name		
Player Settings	Array of player Setting objects	
Each Player Type Settings Object contains		
Player Type	Player type Id (Gold, Silver, etc)	Int
Accrual Rate	Play points accrual percentage	Double
System Game Start Threshold	Live Rewards game start counter	Int
System Game Start Rules	Array of Rules. Each Rule contains	
	Rule Id	Int
	Rule Description	0-20 characters
	Occurrence counter	Int
	Increment Value	Int
Available Games	Array of Game objects. Each object contains	
	Game ID	0-4 characters
	Game Name	0-50 characters

Web Service: postEventLog

The purpose of this message is to store the logs (error logs or events or information) in to the Live Rewards server database occurred in the iVIEW's, example tilt messages on iVIEW's.

	Purpose	Type/Range
Request Parameter Name		
eventType	Type of the event (0-Error, 1-Info, 2-debug)	0-10 characters
iviewId	Machine address of a iVIEW device	0-50 characters
assetId	Asset number assigned to this device or slot/base game	0-8 characters
errCode	Error code defined by the iVIEW if any	0-20 characters
Data	Information/message about the event	0-200 characters
Response Parameter Name		
Result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: unRegisterIView

The purpose of this message is to unregistered the registered iVIEW with the BLRS.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters

-continued

	Purpose	Type/Range
Response Parameter Name		
Result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: getActivePayTableSets

It returns all the active pay table sets, game settings for the Live Rewards games by player types (ex: Gold, Silver, etc.) defined on the BLRS

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
Response Parameter Name		
PTabSets	All pay table sets	XML Node
Result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: getPayTableSet

It returns the requested pay table set object from BLRS.

	Purpose	Type/Range
Request Parameter Name		
PayTableSetId	Pay table set Id	Int
Response Parameter Name		
PTabSets	pay table set	XML Node
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_CreateSession

It creates the Session for requested player on a specified iVIEW. It reserves the buckets for that player in this session.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
plrCardNo	Player Card Number	0-20 characters
Response Parameter Name		
sessionId	A unique session Id	Int
Buckets	An array of buckets. Each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX_Value	Double
	balance	Double

-continued

	Purpose	Type/Range
PlayerData	Player Data object contains	
	plrCardNo	0-20 characters
	playerType	Int
	banned	True/False
IsDeviceActive	Weather the requested iVIEW device is active or not	True/False
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_ValidatePin

It verifies the Player Pin is correct or not through CMS/CMP servers.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
plrCardNo	Player Card Number	0-20 characters
Pin	Pin number	UN KNOWN
Response Parameter Name		
pinStatus	Valid or Not	True/False
isLocked	Locked or Not	True/False
lockTimeinMins	Lock time in minutes	Int
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_IsPlayerLocked

It checks weather the requested player is locked or not in BLRS. If the player is locked it returns lock time in minutes.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
plrCardNo	Player Card Number	0-20 characters
Response Parameter Name		
isLocked	Locked or Not	True/False
lockTimeinMins	Lock time in minutes	Int
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_GetSessionBuckets

It returns the requested player Session Bucket values from reserved buckets (session buckets).

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
plrCardNo	Player Card Number	0-20 characters
sessionId	Session Number	Int
Response Parameter Name		
Buckets	An array of buckets. Each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX_Value	Double
	Balance	Double
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_Deposit

It deposits the requested buckets transaction values in to player's session buckets and it returns the current balances.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
plrCardNo	Player Card Number	0-20 characters
sessionId	Session Number	Int
depositNumber	Deposit counter number	Int
Buckets	An array of buckets. Each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX_Value	Double
	balance	Double
Response Parameter Name		
Buckets	An array of buckets. Each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX_Value	Double
	balance	Double
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_StartWithdrawal

Initiates the withdrawal transaction for requested bucket and returns the BLRS Transaction Number to store in SDS Logs.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
plrCardNo	Player Card Number	0-20 characters
sessionId	Session Number	Int
withdrawalNumber	Withdrawal counter number	Int
Bucket	Bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX_Value	Double
	balance	Double

-continued

	Purpose	Type/Range
Response Parameter Name		
SGS_TransactionID	BLRS Transaction Number to store in the SDS	Int
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters
Buckets	An array of buckets. Each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX_Value	Double
	balance	Double

Web Service: SGS_EndWithdrawal

It completes the withdrawal transaction for the requested BLRS Transaction Number and amount. If the amount is different than the Start amount, balance will deposited back to player account.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
plrCardNo	Player Card Number	0-20 characters
sessionId	Session Number	Int
SGS_TransactionID	BLRS Transaction Number	Int
isCommit	Commit or Rollback	True/False
TRX_Value	Transaction Value to commit or rollback	Double
Response Parameter Name		
SGS_TransactionID	BLRS Transaction Number to store in the SDS	Int
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_BeginGame

Creates the new Game play history Id (HID) and debits the requested buckets transaction values from player session buckets.

	Purpose	Type/Range
Request Parameter Name		
GamePlay	Gameplay object contains	
	GID	0-4 characters
	IviewId	0-50 characters
	plrCardNo	0-20 characters
	sessionId	Int
	casinoId	0-4 characters
	gmuId	0-32 characters
	assetNo	0-8 characters
	startDateTime	Date time
	payTabSetId	Int
	payTabId	Int
	gameSettingsId	Int

-continued

	Purpose	Type/Range
	Array of Buckets. each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX_Value	Double
	balance	Double
Response Parameter Name		
HID	Game play History Id	Int
Buckets	An array of buckets. Each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX_Value	Double
	balance	Double
Result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_EndGame

It closes the Game transaction for the specified HID and stores the bucket transaction values in to player session buckets if any WIN.

	Purpose	Type/Range
Request Parameter Name		
GamePlay	Gameplay object contains	
	HID	Int
	IviewId	0-50 characters
	plrCardNo	0-20 characters
	sessionId	Int
	endDateTime	Date time
	payLineId	Int
	score	Int
	Array of Buckets. each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX_Value	Double
	balance	Double
Response Parameter Name		
HID	Game play History Id	
Buckets	An array of buckets. Each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX_Value	Double
	balance	Double
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_StartHandpay

Initiates the new Hand pay transaction and returns the Hand pay ID with the bucket values to send a message to cage.

	Purpose	Type/Range
Request Parameter Name		
HPType	Hand pay Type (Jurisdiction or player initiated)	Int

-continued

	Purpose	Type/Range
SessionId	Player Current Session Id	Int
IviewId	Machine address of a iVIEW device	0-50 characters
CasinoId	Property Id	0-4 characters
GmuId	Machine address of a device	0-32 characters
AssetNo	Account number of a device	0-8 characters
PLRCardNo	Player card number	0-20 characters
Buckets	Array of Buckets. each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX_Value	Double
	balance	Double
Response Parameter Name		
HPID	Hand pay ID	Int
Result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_EndHandpay

It closes the Hand pay transaction for the request hand pay ID.

	Purpose	Type/Range
Request Parameter Name		
IviewId	Machine address of a iVIEW device	0-50 characters
Player Card Number	Player card number	0-20 characters
SessionId	Player Current Session Id	Int
HandpayId	Hand pay Id	Int
isCommit	Commit the transaction or not	True/False
Completed By	Employee card number	0-20 characters
Response Parameter Name		
HPID	Hand pay ID	
Result	Call result: 0 - success, non-zero - failure	0 or non-negative
errorString	Error description	0-1000 characters

Web Service: SGS_CloseSession

Closes the requested player session on specified iVIEW and moves the player session buckets in to player main account

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
plrCardNo	Player Card Number	0-20 characters
sessionId	Session Number	Int
recoveryYN	Recovery session or normal	True/False
Response Parameter Name		
result	Call result: 0 - success, non-zero - failure	0 or 1
errorString	Error description	0-1000 characters

Web Service: SGS_EGMGamePlay

It posts the EGM game play activity data in to the BLRS. i.e., total coin in, total coin out, # of games played. This data will be posted on every heart beat call to the server, before create session and before close session.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
assetId	Account number of a device	0-20 characters
sessionId	Session Number	Int
totCoinIn	Total coin in	Int
totCoinOut	Total coin out	Int
gamesPlayed	No of games played	Int
Status	Status of the device at the time of posting data	0 = None 1 = Session Open 2 = Session in progress 3 = Session Closed
Response Parameter Name		
result	Call result: 0 - success, non-zero - failure	0 or 1
errorString	Error description	0-1000 characters

Web Service: SGS_QueryWithdrawals

It returns the withdrawal transaction Log for the requested iVIEW and prize type.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
prizeType	Prize type	Int
noofRecords	No-Of records to return	Int
Response Parameter Name		
Withdrawl_Report	Array of Withdrawal_Report object. Each Withdrawal_Report contains	
	tranId	Int
	sessionId	Int
	session_TrxId	Int
	plrCardNo	0-20 characters
	sourceId	0-50 characters
	tranDateTime	Date time
	prizeValue	Double
	jurisdiction	True/False
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_QueryGamePlayLog

It returns the Game play history transactions for the requested iVIEW.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
noofRecords	No-Of records to return	Int

-continued

	Purpose	Type/Range
Response Parameter Name		
GamePlay_Report	Array of Gameplay_Report object. Each Gameplay_Report contains	
	HID	Int
	GID	Int
	IviewId	0-50 characters
	plrCardNo	0-20 characters
	sessionId	Int
	casinoId	0-4 characters
	gmuId	0-32 characters
	assetNo	0-8 characters
	startDateTime	Date time
	endDateTime	Date time
	payTabSetId	Int
	payTabId	Int
	gameSettingsId	Int
	score	Int
	buckets Spent	Bucket values
	buckets Won	Bucket values
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_QueryHandpayLog

It returns the hand pay transactions for the requested iVIEW.

	Purpose	Type/Range
Request Parameter Name		
iVIEW Id	Machine address of a iVIEW device	0-50 characters
noofRecords	No-Of records to return	Int
Response Parameter Name		
HandPay_Report	Array of HandPay_Report object. Each HandPay_Report contains	
	HPID	Int
	HPDesc	0-50 characters
	IviewId	0-50 characters
	plrCardNo	0-20 characters
	sessionId	Int
	casinoId	0-4 characters
	gmuId	0-32 characters
	assetNo	0-8 characters
	createdDateTime	Date time
	completedDateTime	Date time
	completedBy	0-20 characters
	buckets	Bucket values
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

It may be useful to understand the overall system in some detail. FIG. **97** provides an overview of the system and the various servers used. System **9700** includes a game machine **9710**, rewards server **9720**, marketing server **9730**, slot system **9750** and gamenet bridge **9740**. Rewards server **9720** administers player loyalty rewards and maintains player profiles. Marketing system **9730** administers marketing to players and interacts with the rewards server to customize this marketing. It also interacts with slot system **9750**. Slot system **9750** manages the slot system at a high level, administering payout rates and jackpots, for example. Gamenet bridge **9740** communicates with the individual game machines **9710** to track actual games (as opposed to rewards which are handled in communication with rewards server **9720**).

Game **9710** is a gaming system with a GMU **9790**, iView **9755**, and base game processor **9780**. Game **9710** also includes a display **9785**, pinpad **9797** and card reader **9793** (in various embodiments). IView **9755** includes a casino magic interface **9760** with the rewards server **9720** which communicates with a game **9765** and with the iView shell **9770**. The iView shell **9770** also communicates through a GMU service **9775** (or directly) with the base game processor **9780**, and communicates directly with GMU **9790**.

Further aspects of the system will be understood with reference to the following description and accompanying figures. FIG. **98** illustrates an embodiment of a process of operating a gaming machine. Process **9800** and other processes of this document are described in terms of modules which may be executable code, components, subsystems, or other implementations of a system or method which accomplishes the function in question.

Process **9800** initiates at module **9810** with verification of player identity, such as through receipt of player identifying information and authentication of that information with a server, for example. At module **9820**, personalized data associated with the player is received from the server, such as data stored at a rewards server which may modify pay tables, games available, personal preferences, and other data. At module **9830**, a game is played at the gaming device. At module **9840**, base game data from the game (e.g. a result) is sent to a slot accounting server. At module **9850**, base game data is sent to a rewards module (which may be internal to a gaming device) and from there to the rewards server. At module **9860**, bonus data from the slot accounting server is received, such as progressive bonuses and the like. At module **9870**, the gaming device receives trigger(s) and bonus data from the rewards server, such as a trigger to enter a bonus game or to award a bonus. At module **9880**, the gaming device is used to play the bonus game, such as an interactive game, tournament game or a game with enhanced payouts, for example.

FIG. **99** illustrates an embodiment of a process of a slot accounting server interacting with a game machine. Process **9900** initiates at module **9910** with receipt of base game data at the slot accounting server—such as result data for a game. The data is then integrated into the accounting system, such as by increasing a player balance or account value at module **9920**. At module **9930**, any bonus to be transferred to the gaming device is sent to the gaming device.

FIG. **100** illustrates an embodiment of a process of operating a rewards server. Process **10000** initiates with receipt of a player identification (e.g. player identity information and security information such as a PIN) at module **10010** from a gaming device. At module **10020**, the player identity is authenticated, such as through use of a separate server or system, or through a lookup or encryption process, for example, and the results are sent back to the gaming device. At module **10030**, personalized data for the player is looked up, either at the rewards server or at a separate server such as a player marketing server, for example. At module **10040**, the personalized data is sent to the gaming device.

At module **10050**, game data is received at the rewards server from the gaming device. At module **10060**, the game data is analyzed, such as to determine if a rewards threshold has been met, or to accumulate rewards points. At module **10070**, bonus data is sent to the gaming device, such as a bonus jackpot (increased prize). At module **10080**, a bonus

trigger (or triggers) is sent to the gaming device, such as may trigger entry into a bonus game or tournament mode.

FIG. **101** illustrates an embodiment of a gaming system as used with the processes of FIGS. **98-100**, for example. The system in which such processes function may also help illustrate the data flow. System **10100** is an embodiment of a gaming system, similar to that of FIG. **97**, for example. Game device **10110** is a gaming device with a base game **10120** and a rewards module **10130** coupled thereto. Also included is a slot accounting server **10140** and a rewards server **10150**. Not shown are other game devices essentially identical to game device **10110**. Other components (e.g. servers, interfaces, etc.) may also be included.

Using a first protocol, the slot accounting server **10140** communicates with the base game **10120**, receiving game data and transmitting bonus data (such as bonus amounts, for example). Using a second protocol, base game **10120** and rewards module **10130** communicate base game data and personalization data. The second protocol may potentially communicate bonus data or rewards data as well. Triggers of bonus games may also be communicated using the second protocol. A third protocol is used for communication between rewards module **10130** and rewards server **10150**, for the purpose of communicating user identifying data, authentication responses, personalization data, bonus data, bonus triggers (triggering bonus games such as tournament games) and game data. The same protocols may be used with other game devices in the system **10100** as well.

The system further provides the opportunity to transfer bonuses and payouts from one device to another, or to a server. FIG. **102** illustrates an embodiment of a process of paying out and transferring payouts. Process **10200** initiates with receipt of a payout request over a predetermined limit or threshold at module **10210**. Such as threshold may be based on tax regulations, player credit limits, or other factors. At module **10215**, the payout is deferred, with a message to the player or user. Three options then come into play. At module **10220**, the machine may receive employee authorization to pay out the higher amount. This would typically be accompanied by provision of tax data (e.g. a tax form for the payout) at module **10225** and provision of the actual payout at module **10230**.

Alternatively, the payout may be transferred to the rewards server at module **10240** or the payout may be transferred to the slot accounting server at module **10250**. From here, the payout may be handled by transfer to a cage processing machine at module **10260** or by transfer to another machine (e.g. another gaming machine) at module **10270**. A transfer to a cage processing machine at module **10260** essentially implies a payout, and the process may be expected to transition to module **10220** with employee authorization at the game processing machine. A transfer to another gaming machine at module **10270** may also be handled with a payout through employee authorization at module **10220**. Alternatively, the bonus or payout may be used by the player at the other machine by playing the machine with the payout at module **10280**.

FIG. **103** illustrates an embodiment of a gaming system as used with the process(es) of FIG. **102**, for example. Game **10310** is a game at which the payout is received or observed—and deferred. The payout may then be transferred to slot accounting server **10320** or to rewards server **10330**. The payout may then be transferred to cage machine **10340**, where an employee may administer the payout. Alternatively, the payout may be transferred to another game **10350**, where an employee may administer a payout, or the player may play with the winnings. Thus, the player need not wait around for an employee to pay a large payout—the casino can potentially recoup some of the payout through further play, for example.

Further discussion of the protocols and the system of a specific implementation and embodiment may provide additional illustrations. The following discussion does not necessarily apply to all implementations or embodiments—it represents an example embodiment. Referring further to FIG. **97**, an embodiment of a networked gaming system is shown with a player rewards server, a CMP/CMS server, an SDS or SMS server, a GameNet Bridge router, and a gaming machine, where each of the elements may be representative of multiple units which may be connected to function and connect as shown. Within the gaming machine, a game management unit (GMU) connects from the GameNetBridge to a base game processor board, such as a Bally Alpha game board, and to a player interface unit, such as a Bally iView. Within the player interface unit block, executable code is contemplated to be stored on a player interface processor board and may include operating system code, such as Bally iViewShell.exe, player rewards code or callable module, such as Bally CasinoMagic, game code, such as Game.exe, and GMU-related code for providing an information channel between the GMU, base game and player interface unit. Various communication protocols are shown on the respective connecting branches.

. . . Message Protocols—Servers—GMU . . .

SDS Freeform Messaging Protocol

This document defines new message types designed to facilitate more flexible messaging between the Gmu and RS6000 of the SDS system. It allows direct targeting of messages to specific applications and devices, transfer of large blocks of data in a single transaction, and a flexible response mechanism to insure data receipt.

The transport layer of the protocol allows for an embedded application layer in a message.

Transport Layer

The following tables show the transport layer format for two new messages. The first is generated from the RS6000, destined for the Gmu. It has a format that is compatible with existing SDS messaging—it is a new type of unicast message. The second is generated from the Gmu, destined for the RS6000. Again, it has a format that is compatible with existing SDS messaging—it is a new type of exception code message.

Description	RS6K length	RS6K position	RS6K format	GMU length	GMU position	GMU format	Notes
sD/cFB and sE/cFC (RS6K to GMU Freeform)							
CIU special code	2	1-2	"sD" or "sE"				sD = requires response, sE = No response required
Line#	1	3	Ad, '1'-'4'				
GMU address	2	4-5	Ah, "05"-"FF"	1	1	B, S05-SFF	
Poll Code				1	2	B, SFB or SFC	FB = requires respone FC = No response required
Session ID	2	6-7	Ah, "01-"FF"	1	3	B S01-SFF	TCP/IP Service number
Transaction ID	2	8-9	Ah, "01"-"FF"	1	4	B, S01-SFF	Links all messages used to transmit a data set

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Description	RS6K length	RS6K position	RS6K format	GMU length	GMU position	GMU format	Notes
Segment#	4	10-13	Ah, "0001-"FFFF"	2	5-6	B, S01-SFFFF	Identifies this segment
Total Segments	4	14-17	Ah,"0001-"FFFF"	2	7-8	B, S01-SFFFF	total number of segments in a data set
Data length	2	18-19	Ah, "00-"E0"	1	9	B, S00-SE0	Reflects length of next field
Data	0-224	20 to 243	B	0-224	10-233	B	String of GMU commands
Checksum				1	9 to 234	B	2's compliment checksum of all fields
Carriage return	1	20 to 244	const CR (S0D)				
Type A2 (GMU to RS6K Freeform)							
Start of text	1	1	const STX (s02)				
CIU function code	1	2	Ah, '3'				
Line#	1	3	Ad, '1'-'4'				
GMU address	2	4-5	Ah, "05-"FF"	1	1	B S05-SFF	
Message type	2	6-7	const "A2"	1	2	const SA2	
Exception code	2	8-9	Ah	1	3		Denotes message function see Note 1
Session ID	2	10-11	Ah, "01-"FF"	1	4	B S01-SFF	
Transaction ID	2	12-13	Ah, "01-"FF"	1	5	B, S01-SFF	Links all messages used to tranmit a data set
Segment#	4	14-17	Ah, "0001-"FFFF"	2	6-7	B, S01-SFFFF	identifies this segment
Total Segments	4	18-21	Ah, "0001-"FFFF"	2	8-9	B, S01-SFFFF	Total number of segments in a data set
Data length	2	22-23	Ah, "00-"E0"	1	10	B, S00-SE0	Reflect length of next field
Data	0-224	24-247	B	0-224	11-234	B	Application responses
Checksum	2	24 to 248	Ah	1	11 to 235	B	2's compliment checksum of all fields
Carriage return	1	25 to 249	const CR (S0D)				

Formats
A ASCII
Ah ASCII coded hexadecimal
Ad ASCII coded decimal
B Binary (no conversions)
Note 1: B7 = Ack to system message,
B8 = Nack to system message
B9 = Gmu initiated, no response required
BC = Gmu initiated, response required

A sD/FB message is used when a transport response is required from the GMU upon receipt. A sE/FC message is used when a transport response is not required.

The transport response from the Gmu is a type A2 message. The exception code field will indicate the type of transport response being sent from the Gmu (ACK, NAK). On receiving a NAK from the Gmu for a particular sD/FB message, the RS6000 will re-send the message. For successive NAKs, the message will be re-sent five times before it is abandoned.

Exception codes B9 and BC will be used by the Gmu for any messages sent in a Gmu initiated transaction. Both of these exception codes require a transport level Ack. A B9 exception codes will consider an A0 response a transport level Ack. A B0 or no response will be considered a Nak. A BC exception code requires a freeform ack as a transport level Ack. A freeform ack is a sE/FC message with matching session Id, segment, and transaction Id fields.

The Gmu will resend a message 5 times before it is abandoned. The Gmu will not send another message until an ack is received, or the message is abandoned.

Session ID

The session ID field is used to route messages to the correct service at the RS6000 (i.e., SDS, GameTrack, CMS, etc.) Response message from the Gmu will copy the session ID from the message being responded to. For multiple segment transactions, if a segment is received with a session ID not matching that of the current transaction and a response is required for the current segment, the Gmu will respond with a NAK containing the expected session ID. The Session number in a Gmu Initiated transaction will be $80 or'd with the application target ID. (I.e. Tickets=$8A).

Currently Defined Session IDs:

Session ID	Service
0	(Denotes GameNet GMU Status Msg)
1	Intrepid
2	GMU Settings
9	Cash Cage (obsolete)
10	Tickets
11	Tickets
14	eCash
15	Accounting
16	GMU Event (Printer Status)
17	Comp Printing
18	GMU Authentication
41	Directed DMK Fills
126	GMU Debug

Transaction ID

The transaction ID field is used to associate different messages of a particular transaction. All segments of a transaction will have the same transaction ID. Response message from the Gmu will copy the transaction ID from the message being responded to. For multiple segment transactions, if a segment is received with a transaction ID not matching that of the current transaction and a response is required for the current segment, the Gmu will respond with a NAK containing the expected transaction ID.

Segment# and Total Segments

The segment# and total segments fields are used to identify individual segments composing a single transaction. Each segment of a particular transaction is sent sequentially. Regardless of the function code of either of these messages (cFB or cFC), the Gmu will transmit a transport level NAK if a segment is received out of sequence. In this case, the Gmu will send the NAK with segment# and total segment fields

showing the segment expected by the Gmu. Further, for multiple segment transactions, if a segment is received with a total segments field not matching that of the current transaction and a response is required for the current segment, the Gmu will respond with a NAK containing the expected total segments value. Further, if an ACK is sent in response to a sD/FB, the segment# and total segments fields of the ACK will reflect the transport segment being acknowledged.

Data

The data field is used to transport the application layer data. This field can hold singular, multiple, or partial application layer commands in each segment of a transaction. On full transport of a transaction, no partial commands should remain.

Application Layer

Application data is transported via the data field of the freeform messages. Within a single transaction or segment, multiple application layer commands may be transported. This is done using the following command block application layer format.

1 byte	1 byte	0 to 255 bytes
Target ID	Parameter length	Parameter data

Each command block consists of at least two bytes, a target ID and a parameter length. Parameter data is optional. If a command block excludes a parameter data field, the block's parameter length value is zero. For transporting multiple command blocks, within a single message's data field, they can be strung together as in the following example.

Message Data Field						
1st Command block			2nd Command block			
Target ID	Parameter length	Parameter data	Target ID	Parameter length	Parameter data	More blocks . . .

Target ID

The target ID is used to indicate which Gmu application is the target of a particular command block. The parameter data field then becomes the parameter sent to the particular target application. Note the parameter data format is defined by the particular target it is meant for. The following table shows currently supported targets.

Target ID	Description
1	Intrepid
2	Gmu variable action
3	EPI
4	Reserved
5	Application qualifier
6	Application response configuration
7	Application response echo
8	Default I/O
9	Cash Cage (obsolete)
10	Tickets
11	Security
12	Test Box
13	Unused

-continued

Target ID	Description
14	EFT Transactions
15	Accounting Meters
16	GMU Event
17	Printer
18	GMU Authentication
19	System to EPI Display Message
20	Game Info
126	Debug Functions

Target ID #5 is a special kind of target. The application qualifier target allows the sender to continue/discontinue processing the remainder of the application layer dependent on the current state of the GMU. See the following section on Application qualifier for further detail.

Parameter Length

The parameter length byte is used to indicate the number of bytes comprising the following parameter data field. The range of this length is 0 to 255.

Application Response

The target ID can be logically Or'd with $80 (128) to denote application level response required from receiver. An application level response is similar to the transport level response, except the segment# and total segment fields are zero. Additional data included in the response is dependent on the target.

Target Definitions

The following section defines each of the currently supported targets.

Target: GMU Variable Action

This target allows the caller to take specific actions on internal Gmu variables. The parameter data for this target uses its own sub-format as follows:

Variable ID	Value

The default response operation is a variable action command block with the variable action Id as data (i.e. Cardless play time-out response 2,1,1). If this target receives a response required flag and an illegal or unsupported variable ID, it will application NAK with (2, 1, variable ID) in its data field.

The Gmu can request a variable by sending a Variable Action command block with the desired Variable Id as data. (i.e. to request Cardless play time-out the Gmu would send the command block 2,1,1)

Cardless Play Time-Out Set (Variable ID=1)

This action uses the following value structure. See Cardless Play feature documentation for details.

Value structure	UINT, 0 = disable, 1-65535 = time-out (seconds)

Response operation Application ACK on completion with 2, 1, 1 in data field.

Interval rating, coins to qualify set (Variable ID=2)

This action uses the following value structure. See Free-Play feature documentation for details.

Value structure	UINT, 0 = disable, 1-65535 = coins to qualify
Response operation	Application ACK on completion with 2, 1, 2 in data field.

Bonus points subtraction (Variable ID=3)

This action uses the following value structure. See Club Points to Cash feature documentation for details.

Value structure UINT (points to subtract)

Response Operation

Application ACK on completion with 2, 1, 3 in data field. ACK on Points to subtract greater than actual points with 2, 2, 3, and 1 in data field. Note: Variable Id's 4 through 7 are values used in the ticket printing system. The Gmu request these values by sending a variable action command block with the variable Id as data(i.e. 2,1,4 would request a ticket number). The command block is sent in a BA exception code, so the values are returned in the response.

Ticket Number

Value structure STRING3 (Starting ticket number, 6 BCD encoded digits)

Ticket System Slot Id

Value structure STRING3 (Slot Id used in ticket printing, 6 BCD encoded digits)

Ticket Print Date

Value structure STRING3 (Date to be printed on Ticket, 6 BCD encoded digits mm/dd/yy)

Ticket Expiration Date

Value structure STRING3 (Expiration date to be printed on Ticket, 6 BCD encoded digits mm/dd/yy)

Ticket Key

Value structure STRING16 (Encryption seed for ticket Crc)

Liability Limit

Value structure (undefined)

New GMU variables have been added for Gemini that effect how the GMU handles EFT. The EFT System Characteristics flags are set by the system to enable or restrict the type of EFT actions allowed at the game. The EFT Transaction Timeout allows the system to set the amount of time the GMU will wait for EFT application responses before canceling the transaction. The EFT Withdrawal Amounts allow the system to set the values for the 5 withdrawal amount options.

SDS EFT Characteristics

The SDS EFT Characteristics are a set of 3 bit mapped bytes. These flags determine what type of EFT, if any, the SDS system allows for the slot. If a SDS EFT flag is turned off it takes precedence over the corresponding player characteristic flag.

Field	Length	Type	Description
SDS Characteristics	3	BYTE	24 bit mapped flags that determine what type of EFT actions the SDS system allows.

Bit	Meaning
1	EFT Transactions Allowed
2	Allow Cashable Deposits
3	Allow Non-Cashable Deposits
4	Allow Redeem Offers
5	Allow Points Withdrawal
6	Allow Cash Withdrawal
7	Allow Partial Transfers
8-24	Undefined

EFT Transaction Timeout

Field	Length	Type	Description
EFT Timeout Value	1	BYTE	The number of seconds the GMU should wait for EFT responses from the system.

EFT Withdrawal Amounts

This message sets the value of various EFT withdrawal options. If the amount field is 0 then the corresponding withdrawal option is turned off and not displayed to the player. If the amount field is 99999999 then the value of the option is the player's remaining balance.

Field	Length	Type	Description
Option 1 Withdrawal Amount	4	BCD	The withdrawal amount if the player selects option 1
Option 2 Withdrawal Amount	4	BCD	The withdrawal amount if the player selects option 2
Option 3 Withdrawal Amount	4	BCD	The withdrawal amount if the player selects option 3
Option 4 Withdrawal Amount	4	BCD	The withdrawal amount if the player selects option 4
Option 5 Withdrawal Amount	4	BCD	The withdrawal amount if the player selects option 5

Time of Day

This message sends the current time of day.

Field	Length	Type	Description
Time of Day	3	BCD	The current time of day. The format is HHMMSS. It uses 24-hour clock, so 11:17:28 PM would be sent as 231728. When sent by the system the time has been adjusted for time zone and daylight saving time.

Use: If this variable ID is sent without a data segment (82,1, $0d) then it will be seen as a request for the time of day. The response will be either this block with a 3 byte data segment that contains the time of day or else an application nak (2,2, $0d, 0) indicating that the current time is not available.

Target: EPI

This target allows the caller to control any Epi device connected to the Gmu.

The parameter data for this target is a subset of the Epi bus message. It will consist of the Epi device address, and the Epi command as defined in the Epi Bus Protocol.

Epi address	Epi command

The data field of Acknowledgments from the Gmu will contain the Epi device address.

Target: Application Qualifier

This target allows the caller to continue/discontinue processing of the application layer of the message based on qualifiers. The parameter data for this target uses its own sub-format as follows:

Qualifier ID	Value

The following lists currently supported qualifier IDs (see end of document for type abbreviation details).

Player Card ID Equivalent (Qualifier ID=1)

This qualifier uses the following value structure. If the player card ID currently at the GMU differs from the value sent here, the GMU will discontinue processing of the remaining application layer of the transaction.

Value structure STRING10 (player ID)

Response Operation

Application ACK on completion with 5, 2, 1, x in data field. x will be zero if the GMU does not qualify and one if it does.

Player Card Present/Not (Qualifier ID=2)

This qualifier uses the following value structure. If the state of a player card being present or not currently at the GMU differs from the value sent here, the GMU will discontinue processing of the remaining application layer of the transaction.

Value structure BYTE, 0=player card not present, 1=player card present

Response operation Application ACK on completion with 5, 2, 2, x in data field. x will be zero if the GMU does not qualify and one if it does.

Other Response Operations

If this target receives a response required flag and an illegal or unsupported qualifier ID, it will application NAK with (5, 1, qualifier ID) in its data field.

Target: Application Response Configuration

This target allows the caller to configure all successive application reply messages. The parameter data for this target uses its own sub-format as follows:

Configuration ID	Value

The following lists currently supported configuration IDs (see end of document for type abbreviation details).

Player Data (Configuration ID=1)

The value of this configuration selects the data to be added to successive application Acks. This configuration uses the following value structure.

Value structure BYTE (bitmap)

Response Operation

No application ACK is sent from this target.

Bitmap

	Bit							
	7 (MSB)	6	5	4	3	2	1	0 (LSB)
Description	Player card ID	X	X	X	X	X	X	X
Format	STRING10							

If the Player card ID position of the BYTE is set (1), the ACK from the next target, will include a 6, $0C, 1, j, k command block its data field. For example, the Default I/O, Player query (8.2) target would ACK with 6, $0C, 1, j, k, 8, x, 2, y in its data field. Where j is the one byte value of the bitmap, k is the STRING10 player card ID, y is a string containing the player response, and x is 1+the length of y.

Other Response Operations

If this target receives a response required flag and an illegal or unsupported configuration ID, it will application NAK with (6, 1, configuration ID) in its data field.

Target: Application Response Echo

This target allows the caller to configure all successive application reply messages to echo the parameter portion of this command block.

Any data in the parameter portion of this command block is returned in any succeeding application responses from the GMU.

The receiver ignores an acknowledgment flag in this target ID. The application reply (for example, from the Default I/O, Player query (8.2) target) would ACK with 7, j, k, 8, x, 2, y in its data field. Where j is the length of the received parameter, k is the echoed parameter, y is a string containing the player response, and x is 1+the length of y.

Target: Default I/O

This target allows the caller to perform default type I/O at the GMU. The parameter data for this target uses its own sub-format as follows:

Action ID	Argument

The following lists currently supported actions (see end of document for type abbreviation details).

Display Text (Action ID=1)

This action uses the following argument structure.

Argument structure TEXT, string to display

Response Operation

Application ACK on start of display with 8, 1, 1 in data field.

Player Query (Action ID=2)

This action uses the following argument structure. See Player Query feature documentation for details.

Argument structure BYTE (length of question text)+ TEXT (question)+

BYTE (length of prompt text)+TEXT (prompt)+

BYTE (response width, in decimal digits)+

BYTE (response timeout, in seconds)

Response Operation

Automatic application ACK on player responding within response timeout with 8, x, 2, y in data field. Where, y is a string containing the player response and x is 1+the length of y. If the response width was zero, the data will be 8, 1, 2.

Set Lockout (Action ID=3)

This action uses the following argument structure.

Argument structure BYTE, 0=Lockout off, 1=Lockout on

Response Operation

Application ACK after Lockout switched with 8, 1, 3 in data field.

Other Response Operations

If this target receives a response required flag and an illegal or unsupported action ID, it will application NAK with (8, 1, action ID) in its data field.

Target: Cash Cage (Obsolete)

Cash Cage is the Bally bill hopper for slot machines. This hopper pays the player in bills instead of coins. Please see Bally gaming's "Bill Hopper and Cassette memory Subsystem specification", and Bally System's "Bally Cash Cage interface" document for further details on the operation of this device.

The parameter data for this target uses its own sub-format as follows:

Cash Cage Parameter Data

Field	Description
Message type	1 byte message descriptor (1 to 7)
Data	The data associated with that message type (0 to 33 Bytes)

Cash Cage Message Types

1	Bill Cassette Assigned
2	Bill Cassette Removed
3	Bill Cassette Installed
4	Bill Cassette Report
5	Bill Cassette Meters
6	Bill Cassette Tilt
7	Bill Cassette Report Request
8	Bill Cassette Enable/disable
9	Bill Cassette Date and Time set

Message Types 1 through 6 are Gmu to system messages, 7 through 9 are system to Gmu messages.

Bill Cassette Full Information Message Types

Message types 1 through 4 are referred to as full information types; the data for these messages contains the following fields.

Bill Cassette full Information Message Data

Field	Length	Type	Description
Cassette ID	4 Bytes	Bcd	Permanent Id of Cassette
Game Id	4 Bytes	Bcd	Game Identification
Bill Denomination	2 Bytes	Bcd	Denom of Bills
Fill Count	2 Bytes	Bcd	Number of fills
Dispensed Count	2 Bytes	Bcd	Total Bills Dispensed
Escrowed Count	2 Bytes	Bcd	Total Bills Escrowed
Test Count	2 Bytes	Bcd	Total Bills dispensed during test
Overpaid Count	2 Bytes	Bcd	Total Bills overpaid
Date Installed	6 Bytes	Bcd	Date of installation (YYYYMMDDhhmm)
Date Filled	6 Bytes	Bcd	Date of the last fill (YYYYMMDDhhmm)
Docking Station Flag	1 Byte	Byte	1 = Docking station 0 = No docking station

Message types 1 through 3 are sent when the associated event occurs at the game. Message type 4 will only be sent in response to a Bill cassette report request.

Bill Cassette Meters Message Type

Message type 5 will update the bill cassette meters, it will be sent immediately following any exception code if there has been a change in the cash cage meters since the last exception code. It will always be sent following a Gmu power up, Game power up, or Forced periodic exception code. The data for this message type is as follows.

Bill Cassette Meters Message Data

Field	Length	Type	Description
Cassette Id	4	Bcd	Permanent id of Cassette
Dispensed count	2	Bcd	Total Bills dispensed

-continued

Field	Length	Type	Description
Escrowed Count	2	Bcd	Total Bills Escrowed
Test Count	2	Bcd	Total Bills dispensed during test
Overpaid Count	2	Bcd	Total bills overpaid

Bill Cassette Tilt and Time Request Message Types

Message type 6 reports any Cash Cage tilts, or date and time request. The data for this type is as follows.

Bill Cassette Tilt Message Data

Field	Length	Type	Description
Cassette Id	4	Bcd	Permanent Id of Cassette
Cassette Message Code	2	Text	Tilt code (0, 1, 2, 3, 4, 5, 6, 7, 8, 9)
Cassette Message Data	0 to 8	Text	Tilt Data

Tilt Codes

Code	Description	Data
0	Bill hopper Empty	
1	Invalid Crc	
2	Bill hopper overpay	
3	Bill hopper removed	0 = removed, 1 = Installed
4	Game Id mismatch	Game Id in Bcd (4 Bytes)
5	Bill hopper jam	
6	bill rejected/Escrowed	
7	Bill hopper low	
8	bill hopper denomination mismatch	
9	Bill Owed	
A	Date and time request	

Bill Cassette Report Request

Message type 7 will be sent to request a Bill Cassette report from the Gmu. No additional data is sent with this message type.

Response operation: If an Application response is required the Bill cassette report message will be sent in the Ack exception code. A Nak will be contain 9,1,7 in the data field of the Nak exception code.

Bill Cassette Enable/Disable

Message type 8 will be sent to the Gmu to enable or disable the Bill Cassette.

Field	Length	Type	Description
Enable/Disable	1	Byte	0 = disable, 1 = enable

Response operation: If an Application response is required the Gmu will respond with 9,1,8, in the data field of the Ack or Nak exception code.

Bill Cassette Date and Time Set

Message type 9 will be sent to the Gmu in response to a Time and Date request message.

Field	Length	Type	Description
Date and time string	14	STRING 14	MMDDYYYYhhmmss

Response operation: if an application response is required the Gmu will respond with 9,1,9 in the data field of the Ack or Nak exception code.

Target: Ticket Processing

A ticket is a bar code slip that can be redeemed at a slot by inserting it in the note acceptor. A slip printer can also be located at the game to print tickets. This target defines the messages used to transport ticket information to the system.

The parameter data for this target uses its own sub-format as follows:

Ticket Parameter Data

Field	Description
Message type	1 byte message descriptor
Data	The data associated with that message type

Ticket Message Types

1	Ticket Printed
2	Ticket Void
3	Ticket Redemption
4	Redemption Complete
5	Ticket Printing Status
6	Ticket Printing Status Response

All ticket processing messages will have an Application response configuration command block with the player card number.

Ticket Printed

This message is sent when a ticket has been sent to the printer to be printed.

Field	Length	Type	Description
Ticket Id	9	BCD	Coupon number as generated by the Gmu
Amount	4	BCD	Value of the ticket
Type	1	BYTE	0 = cashable, 1 = non-cashable

The Ticket Id is derived from the variables Ticket number, Ticket System Slot Id, These values are set at power up with Gmu Variable action messages.

Ticket Void

This message is sent when a printer was not able to print a ticket. It is used to void a ticket Id previously sent in a ticket Printed message.

Field	Length	Type	Description
Ticket Id	9	BCD	Ticket identifier
Error	1	BYTE	Error code.

Ticket Void Error Codes

Value	Error
0	Unknown
1	Paper out
2	Paper jam
3	Paper low
4	Printer comm failure

Ticket Redemption Request and Ticket Redemption Response

The Gmu sends this when a ticket is inserted into the note acceptor.

Field	Length	Type	Description
Ticket Id	9	BCD	Ticket identifier

The system responds with a ticket redemption response to authorize the redemption.

Field	Length	Type	Description
Ticket Id	9	BCD	Ticket identifier
Amount	4	BCD	Value of the Ticket
Type	1	BYTE	0 = cashable, 1 = non-cashable

Ticket Redemption Complete

This is sent to inform the system of the final status of ticket redemption.

Field	Length	Type	Description
Status	1	BYTE	0 = Success, errors are listed below
Ticket Id	9	BCD	Ticket identifier
Amount	4	BCD	Value of the Ticket
Type	1	BYTE	0 = cashable, 1 = non-cashable

Ticket Redemption Status Values

Value	Meaning
0	Success
1	Coupon rejected by system
2	System comm time out
3	Tilt during transaction
4	Blackout during transaction
5	Game comm time out
6	Value look up table error

Response Operation

All ticket processing messages will be sent in a BA exception code, with an application ack required. The Ticket Redemption Request will consider the Ticket Redemption Response an application ack. All other messages will consider an empty ticket process command block an application response.

Ticket Printing Status

The system will send the Ticket Printing Status block to the GMU query or set the GMU's current ticket printing status. The data portion of the consists of a single command byte.

Field	Length	Type	Description
Command	1	BYTE	0 = Disable Tickets 1 = Enable Tickets 2 = Query Current Ticket Status

If the command byte=2 (query) or the application response bit is set on the target ID then the GMU will respond with a Ticket Printing Status Response block.

Ticket Printing Status Response

The GMU will send the Ticket Printing Status Response block in response to a Ticket Printing Status block from the system. It is used to inform the system of the current state of tickets on the GMU. The data portion of the consists of a single status byte.

Field	Length	Type	Description
Status	1	BYTE	0 = Tickets Disabled 1 = Tickets Enabled 2 = Not a Ticket Capable Game

Target: Security

This target allows the encryption of freeform command blocks. This is accomplished by embedding the command blocks in the Security command block. The command blocks are embedded by including the length of the command blocks in the parameter length of the Security command block.

The parameter data for this target uses its own sub-format as follows:

Ticket Parameter Data

Field	Description
Encryption Type	1 Byte Algorithm type.
Encryption data	Any data needed for the encryption algorithm
Embedded command blocks	The encrypted freeform command blocks

Encryption Types

1	Test
2	Sds Encryption
3	Sds Key exchange (old)
4	Sds Authentication
5	Sds Encryption and Sds Authentication
6	Key Exchange Start
7	Key Exchange End

i.e. an encrypted Ticket Print Message using the test encryption:

$0B,$19,1,xxxx,($0A,$12,000000000000000001)

xxxx=four bytes of test encryption data,

data enclosed in braces would be encrypted.

Response Operation

The application response will be a Security command block with the encryption type and one status byte.

The status byte will=1 if the encryption was successful, 0 if not.

Sds Encryption, Sds Authentication and Sds Key Exchange

If this security method is being used a Sds key exchange with the node's partial key must be sent on power up. The responding node will send a security response, and a Sds key exchange command block with its partial key.

Whenever a Sds key exchange is being sent it must always be the first command block, to ensure that any subsequent command blocks can be decrypted.

The old Key Exchange (encryption type=3) assumed that key exchanges would be initiated by the GMU and that the first message would be a key exchange block with no data (signifying a request to the system to send a new system key). The new key exchange blocks (types 6 and 7) do not assume a request from the GMU. With these either side may initiate a key exchange, and the key start will contain that side's partial key.

If Sds encryption is being used and encryption fails, the response message will have a Sds key exchange command block. The sending node will re-send the failed message with a Sds key exchange command block.

Test Box

This target is used by the Mastercom 250 test box. The data consist of one byte, the address of the test box. This message must be sent on every poll received by the test box. No response operation is defined.

Target: EFT Transactions

EFT transactions, messages that actually move funds back and forth between the game and players' accounts, will be sent in freeform messages. These freeform messages will have a session ID of 14 to indicate that they are to be routed to the EFT module. EFT freeform messages will have a type 14 command block that contains all the information necessary to approve an EFT transaction. This command block will be encrypted within a type 11.5, security command block—Encryption and Authentication

All EFT transactions will have an exception code of BA, and will receive a freeform (poll code sC) response as a transport ack. This freeform ack can either have application data in the data segment or it can have a zero length data segment.

This target defines messages used to transport EFT information to and from the system. The format of this command block is:

Field	Description
Target ID	14 - EFT Transaction
Data Length	Length of the following data
EFT Transaction Type	1 byte message descriptor
EFT Data	Data associated with the particular transaction type.

EFT Transaction Types:

1	Withdrawal Request
2	Withdrawal Authorization
3	Withdrawal Complete
4	Withdrawal Acknowledgement
5	Deposit Request
6	Deposit Authorization
7	Deposit
8	Deposit Acknowledgement
9	Balance Request
10	Balance Response
11	System Enable EFT
12	System Disable EFT
13	Player Enable EFT

Withdrawal Request

Sent by the GMU to the system. It initiates a withdrawal transaction.

Field	Length	Type	Description
Account Type	1	BYTE	
Amount Requested	4	BCD	
Player Card Number	5	BCD	
PIN	2	BCD	

Account Type Table

Account Type	Description
1	Promotional Offer.
2	Points Redemption
3	Player Cash

Account type '1', promotional offer, is a special type. Offers are withdrawals for set amounts (determined by the EFS), and thus the GMU never prompts the player to select an amount.

Withdrawal Authorization

Sent by the system to the GMU in response to a withdrawal request. If the error code is zero then the GMU will attempt to transfer the Cashable and non-cashable values to the slot machine.

Field	Length	Type	Description
Non-Cashable	4	BCD	
Cashable	4	BCD	
Error Code	1	BYTE	
Player Card Number	5	BCD	
Player Flags	3	BIN	
Display Message Length	1	BYTE	
Display Message	0-128	TEXT	

Withdrawal Complete

Sent by the GMU to the system. Informs the system about the final outcome of the withdrawal transfer.

Field	Length	Type	Description
Non-Cashable	4	BCD	Value transferred to Game
Cashable	4	BCD	Value transferred to Game
Error Code	1	BYTE	
Player Card Number	5	BCD	

Withdrawal Acknowledgement

Sent by the System to the GMU. Informs the GMU that the system has received the withdrawal complete and the GMU is now free to release current transaction information. It also allows the system to update player characteristics (which may have changed as a result of the withdrawal) and display an update message to the player (such as new balance).

Field	Length	Type	Description
Player Card Number	5	BCD	
Player Flags	3	BIN	

-continued

Field	Length	Type	Description
Display Message Length	1	BYTE	
Display Message	0-128	TEXT	

Deposit Request

The Non-Cashable or Cashable funds field should be filled with zeros if that fund type is not allowed for the player, (based on system and player characteristics flags). The PIN field should be filled with zeros if PIN is not required.

Field	Length	Type	Description
Non-Cashable	4	BCD	
Cashable	4	BCD	
Player Card Number	5	BCD	
PIN	2	BCD	

Deposit Authorization

This message from the system authorizes the GMU to remove credits form the game and send them to the Electronic Funds Server.

If the Error Code field is non-zero then the GMU will end the deposit transaction without removing credits from the game. Further, if the error code field is non-zero then no other messages will be sent to the Electronic Funds Server for this transaction. The error code value will be sent in the EFT Error Code field of the next EFT Meters exception.

Field	Length	Type	Description
Error Code	1	BYTE	0 = Approved, >0 Cancel Deposit
Player Card Number	5	BCD	
Player Flags	3	BIN	Replace the current player flags with these values.
Display Message Length	1	BYTE	0 = no message.
Display Message	0-128	TEXT	

Deposit

The Non-Cashable and Cashable fields should be filled with zeros if there was an error getting credits from the game.

Field	Length	Type	Description
Non-Cashable	4	BCD	Value of credits removed from Game
Cashable	4	BCD	Value of credits removed from Game
Error Code	1	BYTE	
Player Card Number	5	BCD	

Deposit Acknowledgement

Sent by the System to the GMU. Informs the GMU that the system has received the deposit and the GMU is now free to release current transaction information. It also allows the system to update player characteristics (which may have changed as a result of the deposit) and display an update message to the player (such as new balance).

Field	Length	Type	Description
Player Card Number	5	BCD	
Player Flags	3	BIN	
Display Message Length	1	BYTE	
Display Message	0-128	TEXT	

Balance Request

Field	Length	Type	Description
Player Card Number	5	BCD	
PIN	2	BCD	

Balance Response

Field	Length	Type	Description
Player Card Number	5	BCD	
Player Flags	3	BIN	
Display Message Length	1	BYTE	
Display Message	0-128	TEXT	

System Enable EFT

The enable message will allow the system to turn on EFT at a game. This message will only turn on EFT if the GMU is otherwise approved for EFT. For instance, if upon GMU initialization the SDS EFT Characteristics (Command Block 2.9) indicated that EFT was not allowed, then this message would be ignored. There is no data for this command block.

System Disable EFT

The disable message allows the system to temporarily turn off EFT at a game.

Player Enable EFT

The player enable message will allow the system to turn on EFT while a player is at a game. Ignore this message if the current player card does not match the player card number in the message data.

Field	Length	Type	Description
Player Card Number	5	BCD	
Player Flags	3	BIN	
Display Message Length	1	BYTE	
Display Message	0-128	TEXT	

Special Error Code Handling

In most cases the Player Flags in an EFT block will replace the current player flags in the GMU. There are, however, exceptions to this rule for certain error codes. If error code field in an EFT block equals any of the below values then the GMU should ignore the player flags that came with that block.

Error Code (decimal)	Meaning
32	No Communications with EFS
131	SDS can't authenticate EFS message.

Target ID 15: Accounting Meters

The accounting meter block is used by the GMU to inform the system of the current value of various meters. Each meter block will consist of a series of meters that all come from the same source. For instance, a message may contain two meter blocks; one for meters maintained by the GMU, and a second for game meters.

Field	Size	Format	Comment
Target ID	1	Byte	$0F
Meters Block Length	1	Byte	
Meters Source ID	1	Byte	Identifies what device the meters came from.
Meter Data	1-250		A series of meter blocks. (See below)

Meter Source IDs

Source ID	Meter Source
1	GMU
2	Game

Meter Blocks

The meter block is used to send the current value of an accounting meter to the system. Since meter values can originate from sources other than the GMU they can have variable maximum sizes. One type of game may use 8 digit meters, another 10 digits, and yet another only 6 digits. The Meter Length field is used to inform the system of the maximum size (in BCD bytes) of the meter. The system uses this data to determine the meter rollover point.

The actual meter field is the current value of the meter. The field size is the size of the meter maximum, thus leading zeros should be used when filling this field.

Field	Size	Format	Comment
Meter Tag	1	Byte	$01-$FF
Meter Length	1	Byte	The length in bytes required to hold the maximum value of the meter. This is also the length of the Meter field.
Meter Data	Meter Block Length	BCD	The current value of the meter. Filled with leading zeros.

Currently Defined Meters

Tag ID	Meter Name	Source	Max Length in Bytes
1	Plays	GMU	3
2	Bets	GMU	6
3	Wins	GMU	6
4	Coin Drop	GMU	6
5	Coins Purchased	GMU	6
6	Coins Collected	GMU	6
7	$1 bills	GMU	3
8	$5 bills	GMU	3
9	$10 bills	GMU	3
10	$20 bills	GMU	3
11	$50 bills	GMU	3
12	$100 bills	GMU	3
13	Credits from coupons	GMU	6
14	Credits from bills	GMU	6

-continued

Tag ID	Meter Name	Source	Max Length in Bytes
15	EFT In Cashable	Game	Dependant on Game
16	EFT Out Cashable	Game	Dependant on Game
17	EFT In Non-Cashable	Game	Dependant on Game
18	EFT Out Non-Cashable	Game	Dependant on Game
19	Ticket In Cashable	Game	Dependant on Game
20	Ticket Out Cashable	Game	Dependant on Game
21	Ticket In Non-Cashable	Game	Dependant on Game
22	Ticket Out Non-Cashable	Game	Dependant on Game
23	Ticket In Count Cashable	Game	Dependant on Game
24	Ticket Out Count Cashable	Game	Dependant on Game
25	Ticket In Count Non-Cashable	Game	Dependant on Game

-continued

Tag ID	Meter Name	Source	Max Length in Bytes
26	Ticket Out Count Non-Cashable	Game	Dependant on Game
27	Hand Paid Jackpot	Game	Dependant on Game
28	Cancelled Credit Hand Pay	Game	Dependant on Game
29	Hand Paid Progressive Jackpot	Game	Dependant on Game
30	Machine Paid Progressive Wins	Game or GMU	6
31	EFT In Cashable Promo	Game	Dependant on Game
32	EFT Out Cashable Promo	Game	Dependant on Game

GMU Event Messages

The following chart lists which event and meter blocks should be sent to the system for each exception code. See the 'Meter Sets' table below for the list of what meters are in each category.

XC	Event Name	Standard Data	Game Info Data	Ticket Data	Coupon Data	EFT Data	Coin Meters	Bill Meters	Ticket Meters	EFT Meters	Jackpot
	Null Event	X					Spc	Spc	Spc	Spc	Spc
2	Too Many Bad PINs	X					X	X			
3	Acceptor Hopper Jam	X					X	X			
4	Service Request	X									
5	Spintek Info Message	X					X				
7	DMK Preemptive Fill	X									
8	Hot Player	X					X	X			
9	Diverter Malfunction	X					X	X			
10	Hand-Paid Jackpot	X					X	X			
11	Link Progressive Report	X					X	X			
12	Abandoned card	X					X	X		X	
13	Illegal Card removal	X					X	X			
14	Bad mag card reader	X					X	X			
15	Acceptor large buy-in	X					X	X			
16	Acceptor can't vend	X					X	X			

-continued

XC	Event Name	Standard Data	Game Info Data	Ticket Data	Coupon Data	EFT Data	Coin Meters	Bill Meters	Ticket Meters	EFT Meters	Jackpot
17	GMU update request	X					X	X			
18	Acceptor bad pay	X					X	X			
19	Acceptor runaway hopper	X					X	X			
20	Bonus point rollover	X					X	X			
21	Change Request	X									
22	Beverage Request	X									
23	Game reserved	X					X	X			
24	911 Emergency	X									
25	Request to change GMU	X					X	X			
26	Coupon Redeemed	X			X						
27	Transfer From Game										
28	Coupon Request	X			X						
29	DMK Fill Request	X					X	X			
30	Jackpot to Credit Meter	X					X	X			
31	Bad Machine Pay amt	X					X	X	X		
32	Game MPU removed	X					X	X			
33	Game MPU reinstalled	X					X	X	X		
35	Auxfill door opened	X					X	X			
36	Auxfill door closed	X					X	X			
37	Employee Card in	X					X	X	X	X	
38	Employee card out	X					X	X	X	X	
39	Player Card In (220+)	X					X	X		X	
40	Game MPU reset	X							X	X	
41	Bad Spin	X					X				
42	Bad Spin	X					X				
43	Bad Spin	X					X				
44	Bad Spin	X					X				

-continued

XC	Event Name	Standard Data	Game Info Data	Ticket Data	Coupon Data	EFT Data	Coin Meters	Bill Meters	Ticket Meters	EFT Meters	Jackpot
45	Bad Spin	X					X				
46	Back in play	X					X	X			
47	Reset during payout	X					X	X			
48	Extra coins paid out	X					X	X			
49	Run away hopper	X					X	X			
50	No data on mag card	X					X	X			
52	Jackpot Reset	X									X
54	Coin out jam	X					X				
55	GMU malfunction	X					X	X			
56	GMU power up	X					X	X			
57	Win with no handle pull	X					X	X			
58	Win with no coin in	X					X	X			
59	Hopper can't pay	X					X	X			
60	Forced periodic	X					X	X	X	X	X
61	Periodic	X					X	X			X
62	Blackout	X					X	X			
63	Machine paid jackpot	X					X	X			
64	Slot machine tilt	X					X	X			
65	Game Activity report	X					X				
66	Acceptor removed	X					X	X			
67	Bill cassette is full	X					X	X			
68	Bill cassette is jammed	X					X	X			
69	Acceptor not responding	X					X	X			
70	Acceptor functioning again	X					X	X			
71	Slot door opened	X					X	X	X	X	

-continued

XC	Event Name	Standard Data	Game Info Data	Ticket Data	Coupon Data	EFT Data	Coin Meters	Bill Meters	Ticket Meters	EFT Meters	Jackpot
72	Slot door closed	X					X	X	X		X
73	Drop Door opened	X					X				
74	Drop door closed	X					X				
75	Acceptor door opened	X					X	X			
76	Acceptor door closed	X					X	X			
77	Player Card in	X					X	X		X	
78	Player card removed	X					X	X			
79	Bill cassette removed	X						X	X		
80	Unknown tilt code	X					X	X			
81	Reel spin after index	X					X				
82	Reel spin after index	X					X				
83	Reel spin after index	X					X				
84	Reel spin after index	X					X				
85	Reel spin after index	X					X				
86	Too many bills rejected	X					X	X			
87	Acceptor malfunction	X					X	X			
88	Can't read mag card	X					X	X			
89	Bill vend to credit meter	X					X	X			
90	Coin in jam	X					X	X			
91	Coin drop switch stuck	X					X	X			
92	Acceptor jammed	X					X	X			
93	Too many coins in	X					X				

-continued

XC	Event Name	Standard Data	Game Info Data	Ticket Data	Coupon Data	EFT Data	Coin Meters	Bill Meters	Ticket Meters	EFT Meters	Jackpot
94	Game meters cleared	X					X	X	X	X	
95	Game memory malfunction	X					X	X	X	X	
96	Bill cassette door opened	X						X	X		
97	Bill cassette door closed	X						X	X		
98	GMU meters reset	X					X	X			
160	Patron request for info	X									
161	Unknown table index	X					X	X			
162	Employee key sequence	X									
163	Display fault	X					X	X			
164	Touch Screen error	X					X	X			
165	Low battery condition	X					X	X			
166	Game EPROM Signature Fault	X					X	X			
167	MPU compartment opened	X					X	X			
168	MPU compartment closed	X					X	X			
169	GMU Compartment opened	X					X	X			
170	GMU compartment closed	X					X	X			
171	Game power up	X					X	X	X	X	
172	Game Comm lost	X					X	X			
173	Game comm restored	X	X				X	X			X
174	New Game Selected	X	X				X				
176	Slot Printer Fault	X		X					X		
177	Cash out Request	X					X	X			
178	Start Cardless play	X					X	X	X		
179	End cardless play	X					X	X	X		

-continued

XC	Event Name	Standard Data	Game Info Data	Ticket Data	Coupon Data	EFT Data	Coin Meters	Bill Meters	Ticket Meters	EFT Meters	Jackpot
180	Clear player request	X									
181	Qualifying play achieved	X					X				
182	GMU Intrepidized	X					X	X			
183	Free form Response	—		—	—	—	—	—	—	—	—
184	Free form transport NAK	—		—	—	—	—	—	—	—	—
185	GMU Initiated Free form Message. (no response)	—		—	—	—	—	—	—	—	—
186	Acceptor SW Changed	X						X			
187	Acceptor SW Change Acknowledged	X						X			
188	GMU Initiated Free form Message. (variable response)	—		—	—	—	—	—	—	—	—
189	Ticket Print	X		X					X		
190	Ticket Redeemed	X		X					X		
193	Cashless Withdrawal	X				X				X	
195	Cashless Collect	X				X				X	
196	Cashless Balance Default	X					X	X			

Meter Sets

Meter Set	Meter Ids	Meter Names
Coin	1	Plays
	2	Bets
	3	Wins (Machine Pay Paytable)
	4	Coin Drop
	5	Coins Purchased
	6	Coins collected
	30	Machine Pay Progressive Wins
Bill	7	$1
	8	$5
	9	$10
	10	$20
	11	$50
	12	$100
	13	Coupon Credits
	14	Bill Credits
EFT	15	Cashable EFT In
	16	Cashable EFT Out
	17	Non-Cashable EFT In

-continued

Meter Set	Meter Ids	Meter Names
	18	Non-Cashable EFT Out
	31	EFT In Cashable Promo
	32	EFT Out Cashable Promo
Tickets	19	Cashable Ticket In
	20	Cashable Ticket Out
	21	Non-Cashable Ticket In
	22	Non-Cashable Ticket Out
	23	Cashable Ticket In Cnt
	24	Cashable Ticket Out Cnt
	25	Non-Cashable Ticket In Cnt
	26	Non-Cashable Ticket Out Cnt
Jackpot	27	Hand Paid Jackpot
	28	Cancelled Credit Hand Pay
	29	Hand Paid Progressive Jackpot

Ticket Exception Codes

Ticket meters will be sent after each ticket transaction. The system needs an event code to go with each message for logging and reporting purposes. For this reason 2 new excep-

tion codes have been defined that will be used in the exception code field of the standard GMU Event block.

Because of the larger size of meters and the increase in the number of possible meters sent, it is possible for the data of a meter message to exceed the maximum size of single free-form data segment. Since we can not currently support multiple segment messages we need a method to connect all the data in more than one message. Sending a second message with the same exception code is problematic because the system will interpret it as a second event, for instance a second jackpot, or a second player card in (without a corresponding card out), etc. To avoid this we will use a new exception code: the null exception. The null exception signifies that the message is not an event in itself, but simply the continuation of a previous message. The null exception will have the following characteristics:

The standard GMU Event block will be a duplicate of the previous message, except for the exception code field, which will be the null exception code.

The Transaction ID of the freeform message header will be the same as the previous message.

New Exception Codes

Exception Code	Exception Name	Comment
1	Null	Continued data from previous message
189	Ticket Print	A ticket print operation has completed.
190	Ticket Redeem	A ticket redemption operation has completed.

Target ID 16: GMU Event

The GMU Event block is a set of data describing the status and condition of the GMU, game, and/or attached devices at the time of a particular event. Most events that require notification of the system will contain one or more Event blocks.

GMU Event Block

Field	Size	Format	Comment
Target ID	1	Byte	$10
Status Block Length	1	Byte	
Event Data Set ID	1	Byte	Identifies the set of data in the Event Data section. (See table below).
Event Data	1-250		A set of data fields.

Event Data Sets

Event Data Set ID	Event Set Name
1	Standard Event Data
2	Ticket Event Data
3	EFT Event Data
4	Coupon Event Data

Standard Event Data

The standard event data set will be sent with most event messages, (i.e. exceptions).

Field	Start	Size	Format	Comment
Exception Code	1	1	Byte	
Jackpot ID	2	1	Byte	
Employee Card	3	2	BCD	
Last Bet	5	2	BCD	Formally called Multiplier
Door Status and Message Sequence number	7	1	Byte	Bit mapped data & sequence #
Option byte	8	1	Byte	
Jackpot amount	9	6	BCD	In Pennies
Player Card	14	5	BCD	
Bonus Points	20	2	BCD	
Last Bill entered in validator	22	1	Byte	
SMI Code	23	8	String	
Game Denomination	31	4	BCD	
Casino ID	35	3	String	
Bonus Countdown	38	2	BCD	
Hopper Count	40	2	BCD	

Ticket Event Data

Ticket Event data is data specific to conditions after a ticket transaction.

Field	Start	Size	Format	Comment
Ticket ID	1	9	BCD	Ticket Bar Code Number
Ticket Error Code	10	1	Byte	The Status code from the last ticket transaction.

EFT Event Data

EFT Event data is data specific to conditions before or after an EFT transaction.

Field	Start	Size	Format	Comment
EFT Transaction ID	1	1	Byte	Transaction ID from the previous EFT transactions.
EFT Error Code	2	1	Byte	Error Code from the previous EFT transaction.

Coupon Event Data

The coupon event block replaces the F6 type (coupon) message. It contains the event data specific to redeeming a coupon.

Field	Start	Size	Format	Comment
Cashless Transaction Type	1	1	Byte	$80 for coupon transaction.
Credit Meter Limit/Credit Amount	2	2	BCD	Game credit max on redeem request. Credits added to credit meter on redemption complete.

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Field	Start	Size	Format	Comment
Credit Meter Balance	4	2	BCD	Value of the game credit meter.
Coupon Serial Number	6	8	BCD	The coupon ID number. Bar Code number minus Casino ID.
Game Denom Code/ Completion Status	14	1	Byte	Game denomination on redeem request. Result code on a redemption complete.

Target: SystemPrinter

This target allows the caller to perform generic printing to a GMU controlled printer. The parameter data for this target uses its own sub-format as follows:

Action ID	Argument

The following lists currently supported actions (see end of document for type abbreviation details).

Printstring (Action ID=1) System to GMU

This action uses the following argument structure.

Argument structure TEXT, string to print (Data sent in printers native language)

Response Operation

No application ACK is sent from this target.

PrintstringEnd (Action ID=2) System to GMU

This action uses the following argument structure.

Argument structure No argument structure for this action ID.

Response Operation

Application ACK after determination of print job result with $11, 2, 2,$result byte in data field.

Result Byte	Description
0x11	Print job successful
0x12	Paper out
0x13	undefined
0x14	Paper low
0x15	Printer/paper jam

SetPrintCompValue (Action ID=3) System to GMU

This action uses the following argument structure:

Argument structure Up to 5 separate fields: Value1, Value2, Value3, Value4, Value5. Each field consisting of 4 BCD digits. Example: $1000=(1000), $100=(0100), $10=(0010) $1=(0001)

Value fields are limited to dollar amounts only at this time, max value=9999.

Response Operation

No application ACK is sent from this target.

CompVoucherRequest (Action ID=4) GMU to System

This action uses the following argument structure:

Argument structure 3 fields: Player ID, PIN Number, Voucher Amount

Player ID, 10 digit (5 BCD bytes) of player card number

PIN Number, 4 BCD digits. This is followed by Voucher amount.

Voucher amount, from the SetPrintCompValue message. The field consisting of 4 BCD digits. Example: $1000=(1000), $100=(0100), $10=(0010) $1=(0001)

Value fields are limited to dollar amounts only at this time, max value=9999.

Response Operation

No application ACK is sent from this target.

PrintjobCancel (Action ID=5) System to GMU

This action uses the following argument structure. The system may send this command at any time to cancel any/all print strings previously sent.

Argument structure No argument structure for this action ID.

Response Operation

Application ACK if requested by sender.

Target: GMU Authentication

Action ID	Argument

GMU Authentication Action IDs:

1	Initiate Authentication
2	Authentication Results
3	Authentication Query
4	Authentication Status

Initiate Authentication

This is sent by the system to ask the GMU to calculate and report on its authentication value. The GMU will respond with an Authentication Results block as soon as it knows its authentication value. The argument for this block consists of a 4 byte seed in hex. The seed is used by the GMU when calculating its authentication value. This way every request can create a unique authentication result:

$12,5,1, 4 bytes of seed in hex

Authentication Results

The authentication results block is used by the GMU to send its most recently calculated authentication value to the system. The argument data for this block consists of a 4 byte CRC(32) authentication result (in hex):

$12,5,2, 4 bytes of CRC in hex

Authentication Query

The authentication query allows the system to ask for the last completed authentication results that the GMU calculated. It is distinct from the Initiate authentication in that this does not require the GMU to recalculate the CRC. There is no argument with this block.

$12, 1, 3

Authentication Status

Authentication Status allows the system to ask the current status of the last authentication request. The argument for this block consists of a single status byte.

Authentication Calculation Status Values:

Value	Status
0	Done
1	Still Processing

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Value	Status
2	Not Started
3	Boot CRC Failed

Target ID 19: System to EPI Display Messages19191

Target ID 19: System to EPI Display Message

The System to EPI Display freeform message is used to send messages from the system to the EPI display on the game. These message can be player information, sports/weather, bonus points, ticket/coupon error messages, EFT messages or any other type of message the system programmer should decide to send.

Field	Size	Format	Comment
Target ID	1	Byte	$13 (decimal nineteen)
Message Length	1	Byte	1-220 (number of bytes in freeform message)
Message Type/Target Application	1	Byte	0-255 partially defined. (0xF2, 0xF3)
Message	1-218	Text	See below.

The message is variable depending on the Message type and Target Application. Defined target applications are as follows:

Target Application 1:

Typical message

0x13, 0x07, 0x01, 0x00, 0x04, 'T', 'e', 's', 't'

0x13—Target ID, 0x07—length of freeform command, 0x01—Target Application (01=Ticket Print), 0x00—Message Action (0x00=Solid), 0x04—Actual text message length, Message is "Test".

Target Application 2:

Typical message

0x13, 0x07, 0x02, 0x01, 0x04, 'T', 'e', 's', 't'

0x13—Target ID, 0x07—length of freeform command, 0x02—Target Application (02=Ticket Redeem), 0x01—Message Action (0x01=Blink), 0x04—Actual text message length, Message is "Test".

Target Application 3:

Typical message

0x13, 0x1, 0x03, 0x02, 0x019, 'T','h','i','s',' ','i','s',' ','T', 'e','s','t',' ','o','f',' ','t','h','e',' ','G','M','U'

0x13—Target ID, 0x1C—length of freeform command, 0x03—Target Application (03=Ticket Error), 0x02—Message Action (0x02=Scroll), 0x19—Actual text message length, Message is "This is a Test of the GMU"

The message type/target application can include F2 Promo message types, F3 Sports message types, and Ticket/Coupon error messages. This can be added to in the future and should be compatible with existing messages also.

Typical 0xF2 message:

0x13, 0x07, 0xF2, 0x01, 0x04, 'T', 'e', 's', 't'

0x13—Target ID, 0x07—length of freeform command, 0xF2—sub target (promo message), 0x01—Alternate/Replace Code (0x01=Replace), 0x04—Actual text message length, Message is "Test".

Defined message types are in table X

Target ID 20: Game Info

The Game info block is used to send information about the slot, its configuration, and its current status. The Game Info block is made of 1 or more Game Info Tag blocks, each of which contains a single piece of game data.

Tag ID Block

Field	Size	Format
Tag ID	1	Byte. A number identifying the game information.
Size	1	Byte. The length of the info data.
Game Info	0-127	Varies.

Game Info Tags

Game Info Tag ID	Field	Size	Format	Comment
1	PaytableID	0-11	Text	The Current Game's Pay table identifier
2	CurGamePayBack	1-3	BCD	The Current Game's Payback percentage (max 6 digits).
3	CurGameDenom	1-4	BCD	The Current Game's Denomination (max 8 digits) In pennies
4	CurGameName	0-20	Text	The Name of the Current Game
5	Game Protocol Version	6	Text	The SAS version number.

The CurGamePayBack is sent as 100ths of a percent. So a payback of 97.35% would could be sent as 9735 (or 009735). A payback greater than 100% is possible—so 010200 would be a payback of 102%.

Target ID 126: Debug Functions

General:

The Debug Functions are used by the GMU to inform the system various debug information. The meter sub block provides for expansion capabilities. When the sub block is 0, the actual meters need not be sent.

Field	Size	Format	Comment
Target ID	1	Byte	$FE
Debug Block Length	1	Byte	
Debug Data Type	1	Byte	Identifies type of debug data
Debug Data	1-200		A series of meter blocks. (See below)

Debug Type IDs

Sub Block ID	Debug Data or Command
0	Debug Meters cleared
1	Debug Meters
2	List of Recent Events
3	Debug Text String
4-255	Not Yet Defined

System to GMU:

The system may request the GMU to send debug data by sending a freeform message with the following Application Target:

Field	Size	Format	Comment
Target ID	1	Byte	$FE
Debug Block Length	1	Byte	Value of 1
Debug Sub Block	1	Byte	Identifies subset of debug information.

GMU to System:

Debug Meter Blocks (Debug Type 1)

The format is designed to be similar to but not the same as the format for Accounting meters sent to the system in the freeform messages replacing A2 messages done for Big Meters. The meter block is used to send the current value of debug meter to the system.

Since the meter size is in BCD bytes the actual maximum number of digits must be an even number. Odd numbers of digits can not be supported. Since Debug meters are stored in the GMU as unsigned 2 byte numbers, 0 to 65535 will be the range of the standard debug meters. This will mean that all standard debug meter block lengths will be six BCD digits, that is, 3 bytes.

Since it takes 5 bytes for each meter, a maximum of 44 debug meters can be sent with each freeform segment. When more than 44 debug meters become available, the GMU may send multiple freeform responses to a single freeform request until all meters are sent. When the system is capable of multi segment freeform this will not be necessary.

Field	Size	Format	Comment
Meter Tag	1	Byte	$01-$FF
Meter Length	1	Byte	The length in bytes of the Meter field. 3 for debug meters.
Meter Data	Meter Block Length	BCD, 3 bytes	The current value of the meter. Filled with leading zeros.

The meaning of debug meters may change without notice since they are mostly useful for engineering development. The actual meanings of debug meters on any system report should be reconciled to the GMU document number, version, and prototype letter.

Currently Defined Meters

Tag ID	Meter Name
1	GmCmDn Game Comm Downs
2	GmSeq Game Sequence Errors
3	GmCksm Game Checksum Errors
4	LnDwns Line Down Count
5	NtCksm Net Checksum Errors
6	NtRpol Net Repolls
7	NtMxRp Net Max Repoll Errors
8	NtTQOv Net Transmit Queue Overflows
9	Resets GMU Resets
10	Watdog GMU Watchdogs
11	Povrld GMU stuck in EPI interupt
12	MtrG2 If General meters were bad and were zeroed
13	MtrA1 meters bad and zeroed not at power up
14	NRPdFl pwr up Mtrs bad write fail at power down?
15	MxEQSz Maximum # of Event queue messages
16	MxLpTm Maximum loop time in 100 s of microseconds
17	TmDgRt Minutes since last debug meter reset
18	EQOvRn Event Queue overruns
19	EQMlcE Event Queue Malloc Errors
20	EvtCng Event Changed by code errors
21	DspRst Display Resets received on EPI bus
22	PRst Count of times EPI bus given hard reset
23	PTxFl Transmission failures to EPI devices
24	PrxDup Duplicate messages from EPI devices
25	PCpRst GMU IIC chip lost and reset by watchdogging
26	NoIRst GMU IIC chip & duart lost so watchdogged
27	AdrLos Address lost
28	AdrCng Address changed but recovered
29	StkTop The top of the stack used
30	DrtAEr error on duart A (Network line)
31	DrtBEr error on duart B (game line)
32	FDHErr Display Handler confused
33	PtxQUs max bytes of EPI tx queue used
34	PrxQUs max bytes of EPI rx queue used
35	SrxQUs max bytes of net rx queue used
36	GtxQUs max bytes of game tx queue used
37	GrxQUs max bytes of game rx queue used
38	EvMmUs max bytes of event ram used
39	PTxOvfl # of times EPI bus overflows
40	PTxOffln # of EPI tx's to offline devices
41	MxChpTm max cheap timers used at once
42	PRcvCksm # of EPI receive checksum errs
43	Idunno Third Base!

Zero Debug Meters (Debug Type 0)

When the GMU receives a Zero Debug Meters request (type 0) it should zero the debug meters and return a application message in freeform letting the system know the meters were actually zeroed.

Field	Size	Format	Comment
Target ID	1	Byte	$FE
Meters Block Length	1	Byte	Value of 1
Meters Sub Block	1	Byte	Value of 0

Event List (Debug Type 2)

When the GMU receives a Event List request (type 2) it should send the most recent hogshead events that have been processed. It should then clear its queue so that multiple requests for event lists do not cause the gmu to send duplicate events. Since a single segment freeform message is limited in size, the number of events sent will be limited. event numbers will be sent in two byte BCD format (four digits,) allowing for 100 events. Since four digits only allows for 9999 types of events, any events larger than 9999 will not be sent. This will also allow for some events to be excluded from the events sent. (Events like FreeformStart, FreeformEnd, and FreeformMessage are generated by the request for an event list and one may wish to exclude them from being sent.) The following format is used for the target block

Field	Size	Format	Comment
Target ID	1	Byte	$FE
Debug Block Length	1	Byte	1 to 201, odd #s only
Debug Data Type	1	Byte	2
Debug Data	1 to 100 2 byte blocks	2 BYTE BCD	A series of 2 byte BCD (4 digits) event numbers

Debut Text (Debug Type 3)

When the GMU receives a Debug Text request (type 3) it should send the most recent debug text message that has been generated, after which the GMU should delete it from its queue to avoid sending duplicate messages. If no text message exists, the gmu will send the string "EMPTY!" The maximum length of the text message can be 222 bytes.

Field	Size	Format	Comment
Target ID	1	Byte	$FE
Debug Block Length	1	Byte	7 to 222
Debug Data Type	1	Byte	3
Debug Data	7 to 222 bytes	char	Printable chars only please.

Type Abbreviation Detail

UNIT Unsigned integer. For example, $0105=256^1*1+256^0*5=261

TEXT Variable length string of printable characters

BYTE Unsigned character, hexadecimal, 1 byte

STRINGx String of fixed length×number of BYTEs

BCD Binary Coded Decimal

. . . Message Protocols BLRS/iView . . .

Bally Live Rewards Message Interface Definitions

Bally Live Rewards Server (BLRS) communicates with iVIEW's through Web Services over http/http(s). The following Web Service methods are provided by the Bally Live Rewards Server:

Name	Purpose
registerIView	Register's the iVIEW with BLRS
getSGSDateTime	Returns the current BLRS Date time
getGlobalSettings	Returns the global settings for Live Reward Games
getAllPlayerSettings	Returns the player settings including available games, game start rules and play point value for all the player types
postEventLog	Logs the event message in to BLRS
getActivePayTableSets	Returns the active pay table sets, game settings for all the games and player types
getPayTableSet	Returns the requested pay table set object
unRegisterIView	Un registers the iVIEW with BLRS
SGS_CreateSession	Creates the Session for request player on a specified iVIEW and also returns weather the requested device is active or not.
SGS_ValidatePin	Validates the player PIN number with CMS/CMP
SGS_IsPlayerLocked	Verifies with the BLRS and returns weather the player is locked or not and also returns the time in minutes, how long that player will be locked
SGS_GetSessionBuckets	Returns the all player current session bucket balance values
SGS_Deposit	Deposits the requested player bucket transaction value in to the BLRS
SGS_StartWithdrawal	Initiates the withdrawal transaction with BLRS for a specified player bucket transaction value in BLRS
SGS_EndWithdrawal	Closes the opened withdrawal transaction
SGS_BeginGame	Initiates the begin game transaction with BLRS
SGS_EndGame	Closes the opened game play transaction
SGS_StartHandpay	Imitates the hand pay transaction with BLRS
SGS_EndHandpay	Closes the opened Hand pay
SGS_CloseSession	Closes the opened session
SGS_EGMGamePlay	Posts the EGM activity. i.e., total coin In, total coin Out and No-of games played to the BLRS.

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Name	Purpose
SGS_QueryGameplayLog	Returns the game play transactions log for the requested device
SGS_QueryWithdrawals	Returns the withdrawal transactions log for the requested device
SGS_QueryHandpayLog	Returns the hand pay transactions log for the requested device

Services Specs

Return Values

All web services will return an object. All return objects inherit from the same base class and therefore always contain the following fields:

Response Parameter Name	Purpose
result	Call result: 0 - success, non-zero - failure
errorString	Error description (empty if success)

Error Codes

Error Description	Error Code
GENERIC_SYSTEM_ERROR	-1
SUCCESS	0
SUCCESS_WITH_DUPLICATE_TRANSACTION	1
INVALID_PARAMS	2
SESSION_ID_INVALID	10
SESSION_SUSPENDED	11
SESSION_CLOSED	12
SESSION_VALIDATION_FAILURE	13
SESSION_CLOSE_FAILURE_PENDING_TRANSACTIONS	14
INSUFFICIENT_FUNDS	20
INVALID_SESSSION_DEPOSIT_NUMBER	21
INVALID_SESSSION_WITHDROWAL_NUMBER	22
TRANSACTION_ID_INVALID	23
TRANSACTION_VALIDATION_FAILURE	24
ATTEMPT_TO_ROLLBACK_COMMITED_TRANSACTION	25
ATTEMPT_TO_COMMIT_ROLLEDBACK_TRANSACTION	26
NON_JURISDICTION_WITHDRAWALS_ONLY	27
JURISDICTION_WITHDRAWALS_ONLY	28
INVALID_HANDPAY_ID	40
HANDPAY_VALIDATION_FAILURE	41
ATTEMPT_TO_COMPLETE_CANCELLED_HANDPAY	42
ATTEMPT_TO_CANCEL_COMPLETED_HANDPAY	43
ATTEMPT_TO_COMPLETE_COMPLETED_HANDPAY	44
CMS_FUNCTION_FAILED	70
INVALID_HID	80
LAST_ERROR	10000

Web Service: registerIView

The purpose of this message is to create a unique iVIEW Id on the Live Rewards Server; if that specified iVIEW Id (machine address of a device) already exists in the BLRS database it updates the related information with the same iVIEW Id. All the information that is stored along with the unique iVIEW Id is reference purpose to identify the device and its location.

Request Parameter Name	Purpose	Type/Range
iviewId	Machine address of iVIEW device	0-50 characters
casinoId	Unique for each casino	0-4 characters
gameSerialNo	Serial number of cabinet	0-40 characters
gameId	Manufacturer type	0-5 characters
payTableId	Unique Pay Table Id	0-6 characters
basePer	Theoretical pay back	0-10 characters
gmuTime	Gmu time	0-6 characters
maxBet	Max bet for game	0-12 characters
gmuId	Gmu network address	0-32 characters

-continued

	Purpose	Type/Range
protocolVersion	Version number of protocol	0-16 characters
enableFeatures	SAS related bit mapped field of features the game has enabled	0-6 characters
gameType	Type of ecash game	0-3 characters
enable	Enable or disable Live Rewards Game messaging	True/False
denomination	No-of pennies in credit for game played	0-12 characters
totalCoinIn	Coin in game meter in pennies	0-12 characters
totalCoinOut	Coin out game meter in pennies	0-12 characters
gamesPlayed	No-of games played	0-12 characters
assetId	Unique identifier to the casino for the cabinet	0-8 characters
Response Parameter Name		
isActive	iVIEW device is active or not in the BLRS	True/False
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: getSGSDateTime

The purpose of this message is to sync the iVIEW device clock with the Live Rewards Server clock. This message returns the current Live Rewards Server date and time.

	Purpose	Type/Range
Request Parameter Name		
None		
Response Parameter Name		
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters
CurrentDateTime	Current Live Rewards Server date and time	Date and time object

Web Service: getGlobalSettings

The purpose of this message is to control the Live Rewards games/console on iVIEW depending on the settings defined on the server side.

It returns the Global settings (these settings are common for all the iVIEW's) defined on the Live Rewards Server

	Purpose	Type/Range
Request Parameter Name		
IviewId	Machine address of iVIEW device	0-50 characters
Response Parameter Name		
Resync Interval	Resync interval rate in mins for iVIEW to request the global settings, active pay table sets and player type settings from BLRS.	Double
System game mode volume	Live Rewards game volume in percentage	Int
Attract mode volume	iVIEW attract mode volume in percentage	Int
Auto Play	True - auto play enabled, False - auto play disabled	True/False
*Tilt Time	Time in mins to tilt the system games	Int
*Auto Remove Play points	Time in minutes to clear the not used Live Rewards game play points on the device. 0 = this feature is OFF	Int
Jurisdictional Limit	Array of Prize Type Limit objects. Each object contains prize type Id and limit number	Double

*Means not used

Web Service: getAllPlayersSettings

It returns the player settings including accrual rate, Live Rewards game start threshold counter and Live Rewards game start rules for all the player types (ex: Gold, Silver, etc.) defined on the BLRS

	Purpose	Type/Range
Request Parameter Name		
IviewId	Machine address of iVIEW device	0-50 characters
Response Parameter Name		
Player Settings Each Player Type Settings Object contains	Array of player Setting objects	
Player Type	Player type Id (Gold, Silver, etc)	Int
Accrual Rate	Play points accrual percentage	Double
System Game Start Threshold	Live Rewards game start counter	Int

-continued

	Purpose	Type/Range
System Game Start Rules	Array of Rules. Each Rule contains	
	Rule Id	Int
	Rule Description	0-20 characters
	Occurrence counter	Int
	Increment Value	Int
Available Games	Array of Game objects. Each object contains	
	Game ID	0-4 characters
	Game Name	0-50 characters

Web Service: postEventLog

The purpose of this message is to store the logs (error logs or events or information) in to the Live Rewards server database occurred in the iVIEW's, example tilt messages on iVIEW's.

	Purpose	Type/Range
Request Parameter Name		
eventType	Type of the event (0-Error, 1-Info, 2-debug)	0-10 characters
iviewId	Machine address of a iVIEW device	0-50 characters
assetId	Asset number assigned to this device or slot/base game	0-8 characters
errCode	Error code defined by the iVIEW if any	0-20 characters
data	Information/message about the event	0-200 characters
Response Parameter Name		
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: unRegisterIView

The purpose of this message is to unregistered the registered iVIEW with the BLRS.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
Response Parameter Name		
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: getActivePayTableSets

It returns all the active pay table sets, game settings for the Live Rewards games by player types (ex: Gold, Silver, etc.) defined on the BLRS

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters

-continued

	Purpose	Type/Range
Response Parameter Name		
PTabSets	All pay table sets	XML Node
Result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: getPayTableSet

It returns the requested pay table set object from BLRS.

	Purpose	Type/Range
Request Parameter Name		
PayTableSetId	Pay table set Id	Int
Response Parameter Name		
PTabSets	pay table set	XML Node
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_CreateSession

It creates the Session for requested player on a specified iVIEW. It reserves the buckets for that player in this session.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
plrCardNo	Player Card Number	0-20 characters
Response Parameter Name		
sessionId	A unique session Id	Int
Buckets	An array of buckets. Each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX_Value	Double
	balance	Double
PlayerData	Player Data object contains	
	plrCardNo	0-20 characters
	playerType	Int
	banned	True/False
IsDeviceActive	Weather the requested iVIEW device is active or not	True/False
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_ValidatePin

It verifies the Player Pin is correct or not through CMS/CMP servers.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
plrCardNo	Player Card Number	0-20 characters
Pin	Pin number	UNKNOWN

-continued

	Purpose	Type/Range
Response Parameter Name		
pinStatus	Valid or Not	True/False
isLocked	Locked or Not	True/False
lockTimeinMins	Lock time in minutes	Int
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_IsPlayerLocked

It checks weather the requested player is locked or not in BLRS. If the player is locked it returns lock time in minutes.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
plrCardNo	Player Card Number	0-20 characters
Response Parameter Name		
isLocked	Locked or Not	True/False
lockTimeinMins	Lock time in minutes	Int
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_GetSessionBuckets

It returns the requested player Session Bucket values from reserved buckets (session buckets).

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
plrCardNo	Player Card Number	0-20 characters
sessionId	Session Number	Int
Response Parameter Name		
Buckets	An array of buckets. Each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX__Value	Double
	Balance	Double
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_Deposit

It deposits the requested buckets transaction values in to player's session buckets and it returns the current balances.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
plrCardNo	Player Card Number	0-20 characters
sessionId	Session Number	Int
depositNumber	Deposit counter number	Int
Buckets	An array of buckets. Each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX__Value	Double
	balance	Double
Response Parameter Name		
Buckets	An array of buckets. Each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX__Value	Double
	balance	Double
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_StartWithdrawal

Initiates the withdrawal transaction for requested bucket and returns the BLRS Transaction Number to store in SDS Logs.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
plrCardNo	Player Card Number	0-20 characters
sessionId	Session Number	Int
withdrawalNumber	Withdrawal counter number	Int
Bucket	Bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX__Value	Double
	balance	Double
Response Parameter Name		
SGS__TransactionID	BLRS Transaction Number to store in the SDS	Int
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters
Buckets	An array of buckets. Each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX__Value	Double
	balance	Double

Web Service: SGS_EndWithdrawal

It completes the withdrawal transaction for the requested BLRS Transaction Number and amount. If the amount is different than the Start amount, balance will deposited back to player account.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
plrCardNo	Player Card Number	0-20 characters

-continued

	Purpose	Type/Range
sessionId	Session Number	Int
SGS_TransactionID	BLRS Transaction Number	Int
isCommit	Commit or Rollback	True/False
TRX_Value	Transaction Value to commit or rollback	Double
Response Parameter Name		
SGS_TransactionID	BLRS Transaction Number to store in the SDS	Int
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_BeginGame

Creates the new Game play history Id (HID) and debits the requested buckets transaction values from player session buckets.

	Purpose	Type/Range
Request Parameter Name		
GamePlay	Gameplay object contains	
	GID	0-4 characters
	IviewId	0-50 characters
	plrCardNo	0-20 characters
	sessionId	Int
	casinoId	0-4 characters
	gmuId	0-32 characters
	assetNo	0-8 characters
	startDateTime	Date time
	payTabSetId	Int
	payTabId	Int
	gameSettingsId	Int
	Array of Buckets. each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX_Value	Double
	balance	Double
Response Parameter Name		
HID	Game play History Id	Int
Buckets	An array of buckets. Each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX_Value	Double
	balance	Double
Result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_EndGame

It closes the Game transaction for the specified HID and stores the bucket transaction values in to player session buckets if any WIN.

	Purpose	Type/Range
Request Parameter Name		
GamePlay	Gameplay object contains	
	HID	Int
	IviewId	0-50 characters
	plrCardNo	0-20 characters
	sessionId	Int
	endDateTime	Date time
	payLineId	Int
	score	Int
	Array of Buckets. each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX_Value	Double
	balance	Double
Response Parameter Name		
HID	Game play History Id	
Buckets	An array of buckets. Each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX_Value	Double
	balance	Double
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_StartHandpay

Initiates the new Hand pay transaction and returns the Hand pay ID with the bucket values to send a message to cage.

	Purpose	Type/Range
Request Parameter Name		
HPType	Hand pay Type (Jurisdiction or player initiated)	Int
SessionId	Player Current Session Id	Int
IviewId	Machine address of a iVIEW device	0-50 characters
CasinoId	Property Id	0-4 characters
GmuId	Machine address of a device	0-32 characters
AssetNo	Account number of a device	0-8 characters
PLRCardNo	Player card number	0-20 characters
Buckets	Array of Buckets. each bucket contains	
	prizeTypeId	Int
	jurisdiction	True/False
	TRX_Value	Double
	balance	Double
Response Parameter Name		
HPID	Hand pay ID	Int
Result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_EndHandpay

It closes the Hand pay transaction for the request hand pay ID.

	Purpose	Type/Range
Request Parameter Name		
IviewId	Machine address of a iVIEW device	0-50 characters
Player Card Number	Player card number	0-20 characters
SessionId	Player Current Session Id	Int
HandpayId	Hand pay Id	Int
isCommit	Commit the transaction or not	True/False
Completed By	Employee card number	0-20 characters
Response Parameter Name		
HPID	Hand pay ID	
Result	Call result: 0 - success, non-zero - failure	0 or non-negative
errorString	Error description	0-1000 characters

Web Service: SGS_CloseSession

Closes the requested player session on specified iVIEW and moves the player session buckets in to player main account

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
plrCardNo	Player Card Number	0-20 characters
sessionId	Session Number	Int
recoveryYN	Recovery session or normal	True/False
Response Parameter Name		
result	Call result: 0 - success, non-zero - failure	0 or 1
errorString	Error description	0-1000 characters

Web Service: SGS_EGMGamePlay

It posts the EGM game play activity data in to the BLRS. i.e., total coin in, total coin out, # of games played. This data will be posted on every heart beat call to the server, before create session and before close session.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
assetId	Account number of a device	0-20 characters
sessionId	Session Number	Int
totCoinIn	Total coin in	Int
totCoinOut	Total coin out	Int
gamesPlayed	No of games played	Int
Status	Status of the device at the time of posting data	0 = None 1 = Session Open 2 = Session in progress 3 = Session Closed

-continued

	Purpose	Type/Range
Response Parameter Name		
result	Call result: 0 - success, non-zero - failure	0 or 1
errorString	Error description	0-1000 characters

Web Service: SGS_QueryWithdrawals

It returns the withdrawal transaction Log for the requested iVIEW and prize type.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
prizeType	Prize type	Int
noofRecords	No-Of records to return	Int
Response Parameter Name		
Withdrawl_Report	Array of Withdrawal_Report object. Each Withdrawal_Report contains	
	tranId	Int
	sessionId	Int
	session_TrxId	Int
	plrCardNo	0-20 characters
	sourceId	0-50 characters
	tranDateTime	Date time
	prizeValue	Double
	jurisdiction	True/False
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_QueryGamePlayLog

It returns the Game play history transactions for the requested iVIEW.

	Purpose	Type/Range
Request Parameter Name		
iviewId	Machine address of a iVIEW device	0-50 characters
noofRecords	No-Of records to return	Int
Response Parameter Name		
GamePlay_Report	Array of Gameplay_Report object. Each Gameplay_Report contains	
	HID	Int
	GID	Int
	IviewId	0-50 characters
	plrCardNo	0-20 characters
	sessionId	Int
	casinoId	0-4 characters
	gmuId	0-32 characters
	assetNo	0-8 characters
	startDateTime	Date time
	endDateTime	Date time
	payTabSetId	Int
	payTabId	Int

-continued

	Purpose	Type/Range
	gameSettingsId	Int
	score	Int
	buckets Spent	Bucket values
	buckets Won	Bucket values
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

Web Service: SGS_QueryHandpayLog

It returns the hand pay transactions for the requested iVIEW.

	Purpose	Type/Range
Request Parameter Name		
iVIEW Id	Machine address of a iVIEW device	0-50 characters
noofRecords	No-Of records to return	Int
Response Parameter Name		
HandPay_Report	Array of HandPay_Report object. Each HandPay_Report contains	
	HPID	Int
	HPDesc	0-50 characters
	IviewId	0-50 characters
	plrCardNo	0-20 characters
	sessionId	Int
	casinoId	0-4 characters
	gmuId	0-32 characters
	assetNo	0-8 characters
	createdDateTime	Date time
	completedDateTime	Date time
	completedBy	0-20 characters
	buckets	Bucket values
result	Call result: 0 - success, non-zero - failure	Int
errorString	Error description	0-1000 characters

While the example embodiments have been described with relation to a gaming environment, it will be appreciated that the above concepts can also be used in various non-gaming environments. For example, such rewards can be used in conjunction with purchasing products, e.g., gasoline or groceries, associated with vending machines, used with mobile devices or any other form of electronic communications. Accordingly, the disclosure should not be limited strictly to gaming.

The foregoing description, for purposes of explanation, uses specific nomenclature and formula to provide a thorough understanding of the invention. It should be apparent to those of skill in the art that the specific details are not required in order to practice the invention. The embodiments have been chosen and described to best explain the principles of the invention and its practical application, thereby enabling others of skill in the art to utilize the invention, and various embodiments with various modifications as are suited to the particular use contemplated. Thus, the foregoing disclosure is not intended to be exhaustive or to limit the invention to the precise forms disclosed, and those of skill in the art recognize that many modifications and variations are possible in view of the above teachings.

The invention claimed is:

1. A method comprising:

receiving player identification at a first gaming machine from a player rewards card;

verifying player identification data of the player rewards card with an identification input of a player;

playing a game by the player at the first gaming machine;

accumulating a balance above a first threshold amount;

paying out a first portion of the balance equal to or below the first threshold amount to the player in response to a request by the player;

deferring payout of a second portion of the balance above the first threshold amount;

transferring the second portion of the balance to a second gaming machine;

playing a game by the player at the second gaming machine using the second portion of the balance;

providing tax documentation comprising one or more tax forms completed by the player as a condition to paying out the second portion of the balance;

receiving a casino employee identification at the first or second gaming machine; and

paying out the second portion of the balance subsequent to providing tax documentation and receiving the casino employee identification.

2. A method as recited in claim **1** wherein the casino employee identification is provided at the first gaming machine.

3. A method as recited in claim **1** further comprising transferring the second portion of the balance to a server.

4. A method as recited in claim **1** further comprising paying out the second portion of the balance responsive to a casino employee identification provided at the second gaming machine.

5. A method as recited in claim **3** further comprising transferring the second portion of the balance from the server to a cage machine.

6. A method as recited in claim **5** wherein the casino employee identification is provided at the cage machine.

7. A method as recited in claim **3** wherein the server is a first server having a slot accounting system and the second portion of the balance is a progressive bonus.

8. A method as recited in claim **3** wherein the server is a second server having a rewards system and the second portion of the balance is a rewards bonus.

9. A method as recited in claim **1** wherein the first threshold amount is an amount determined based on tax regulations.

10. A method as recited in claim **1** wherein the first threshold amount is an amount determined based on total bonuses.

11. A method as recited in claim **3** wherein verifying player identification data includes submitting player identification data and the input of the player to the server.

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